



# THE MARITIME GROUP EUROPE

Marine Consultants, Ship Managers and Brokers



In partnership with



## OPERATIONAL RESILIENCY AND EFFICIENCY

Alaska Department of Transport & Public Facilities

### TASK 2 of AMHS Comprehensive Evaluation

Project No: *TMG 00322/EBDG J22039*

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With: McKinley Research Group, LLC



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## ..ABBREVIATIONS:

The following abbreviations may be used in the text.

24/7	24 hrs. per day/7 days per week
AASP	Alaska Aviation System Plan
ABS	American Bureau of Shipping Classification Society
ACF	Alaskan Class Ferry
ADA	Americans with Disabilities Act
AMHS	<b>Alaska Marine Highway System</b>
AK	State of Alaska, USA
AMHOB	Alaska Marine Highway Operating Board
AMOS M&P	Asset Management Operating System, Maintenance & Procurement
ASEA	Alaska State Employees Association
BC	British Columbia, Canada
C	Degrees Celsius
cm	centimeter (s)
CIP(s0	Capital Improvement Project (s)
CEO	Chief Executive Officer
CFR	US Code of Federal Regulations
CPA	Controllable Pitch
CPP	Certified Public accountant
CPP	Controllable Pitch Propeller
DOA	Alaskan Department of Administration
DOT/DOT&P	Alaskan Department of Transportation & Public Facilities
DSR	Design Study Reports
DSF	Dispatch Selection Form
DWT	Deadweight Tonnage
EBDG	<b>Elliot Bay Design Group</b>
EEDI	Energy Efficiency Design Index
EIA	Environment Impact Assessment
EPIC	Engineering Procurement Installation
E&S	Environmental and Safety
ESOP	AMHS Engineering Standard Operating Procedures
ETA	Estimated Time of Arrival
EU or E.U.	European Union
ETD	Estimated Time of Departure
FCS	Fleet Condition Survey
FDD	Floating Dry Dock
Fig:	Figure
ft	Foot (feet) – Imperial system of measurement
FY	Fiscal Year
g/cm3	Grams per Cubic Centimeter
GDP	Gross Domestic Product
GM	General Manager
GMDSS	Global Maritime Distress and Safety System
GMT	Greenwich Mean Time
GOS	Gross Operating surplus
GT	Gross Tonnage
Hr. or h	Hour(s)
HSSC	Harmonized System m of Survey and Certification
HP	Horsepower
HR	Human Resources
HSC	High Speed Craft
HSEQ	Health, Safety, Environmental & Quality
HQ	Headquarters
IBU	Inland Boatman's Union of the Pacific
ILO	International Labor Organization
IMO	International Maritime Organization
ISM	International Safety Management regulations
ISO	International Standards Organization
ISPS	International Ship and Port Facility Security Code
ICT	Information and Communications Technologies
IT	Information Technology
ITF	International Transport Federation
k	Thousands
kHz	Kilohertz
km	Kilometer(s)
kn(s)	Knot(s)
KPI	Key Performance Indicator
kW	Kilowatt(s)
lt(s) or Ltr(s)	Liter(s)
LBP	Length between Perpendiculars
LCT	Landing Craft Tank
LDT	Light Displacement Tonnage
LMT	Local Mean Time
LNG	Liquid Natural Gas
LOA	Length Overall
LOADSLINE	International Loadline Regulations
LPG	Liquid Petroleum Gas
LPP	Length between Perpendiculars
LSA	Life Saving Appliances
LT	Local Time
m	Metre(s) – metric system of measurement
m3	Cubic Metre(s)
MARAD	USA Maritime Administration
MARPOL	International Marine Pollution Regulations
mb	Millibar(s)
MDO	Marine Diesel Oil
MEBA	Marine Engineers Beneficial Association
MGO	Marine Gas Oil
MLC	Maritime Labor Convention 2006
MMC	Merchant Mariner Card
MTAB	Marine Transportation Advisory Board

min or ‘	Minute(s)
MGOLS	Marine Gas Oil Low Sulphur fuel
MHz	Megahertz
mio	Millions
m/s	Meters Per Second
MMP	Masters, Mates and Pilots Union
MS	Microsoft
MSC	IMO Marine Safety Committee
MTS	Maritime Training Services, USA
MV	Motor Vessel
NB	Nota Bene (notes/Note well)
NDA	Non-Disclosure (confidentiality) Agreement
nm or n.mile	Nautical Mile
No(s)	Number(s)
NT	Net Tonnage
NTP	AMHS Notice of Order to Proceed
OOW	Officer of the Watch
OQM	Organizational Quality Management
OSHAS	International Occupational Safety and Health Accreditation.
P.a.	Per Annum
PC	Personnel Costs
PDR	Preliminary Design Review/Personal development Review
PDT	Pacific Daylight Time (West coast USA/Canada)
PEC	Pilotage Exemption Certificate
P&I	Protection and Indemnity Insurance
PM	Planned Maintenance
PMS	Project Management System
POL	Petrol, Oil and Lubricants
PPE	Personal Protective Equipment
PRINCE2	<b>Projects IN Controlled Environments</b> , method for effective project management.
Pt	Port side
PSC	Port State Control
PVSA	Passenger Vessels Services Act
PCIX	Port State Control Information Exchange
R&D	Research and Development
RFP	Request for Proposal
RFQ	Request for Quotation
ROM	Rough Order of Magnitude
RoE	Rate of Exchange (Currency)
RoRo	Roll on Roll off
RoPax	Roll on Roll off Passenger ship or ferry
rpm	Revolutions Per Minute
S or”	Second(s)
SME	Subject Matter Expert
SMR	AMHS Ship Maintenance Request
SMS	Safety management System
SOLAS	IMO Safety of Life at Sea regulations
SOPs	Standard Operating Procedures
SOW	Scope of Work
Sq	Square
STCW	IMO International Standards of Training, Certification & Watch keeping
STIP	Short Term Investment Plan
STIP	State-wide Transportation Improvement Program
Stbd	Starboard side
SWOT	Strengths, Weaknesses, Opportunities and Threats
t or T	Metric Tonne weight
T&Cs	Terms & Conditions
TMG	<b>The Maritime Group (International) Limited</b>
tpa	Tonnes per Annum
tpd	Tonnes Per Day
TORs	Term(s) of Reference
UK/U.K.	United Kingdom
USA/U.S.A	United States of America
USCG	United States Coast Guard
USD/US\$/	USA Dollars
UTC	Universal Time Constant (also GMT)
UWILD	Underwater in lieu of inspection in DD
VA	Value Added
UTC	Coordinated Universal Time Constant
VCM	AMHS Vessel Construction Manager
VFM	Value for Money
VTC	Video Teleconferencing
VTS	Vessel Traffic Services
WA	<b>State of Washington, USA</b>
WSF	Washington State Ferries

# 1 Introduction

## 1.1 Introduction:

*“The State of Alaska Department of Transportation and Public Facilities (DOT&PF or Department) is seeking professional services to conduct a comprehensive review of Alaska Marine Highway System (AMHS) Operations. The purpose of the review is to assist the department with identifying areas of operational improvement and identifying practical and effective solutions. The contractor will be provided access to the system, including vessels, shoreside facilities, and staff, and will have reasonable access to the system data. Upon completion of review activities, the contractor will prepare a comprehensive report summarizing the findings. The report will assist AMHS Management, DOT&PF, Governor’s Office, State of Alaska Legislature, and the Alaska Marine Highway Operations Board (AMHOB) with long-term planning and decision making.”*

## 1.2 Objective:

- 1.2.1 Evaluate the adequacy of operational effectiveness and efficiency consistent with the objectives of AMHS. Review the use of resources, procedures, and practices at AMHS to determine if goals and objectives are being met in the most effective and efficient manner. Assess the internal control environment of AMHS regarding managing and mitigating inherent risks.
- 1.2.2 Identify areas for increased efficiency.

## 1.3 Deliverable:

- 1.3.1 The contractor must produce and deliver to the DOT&PF Project Manager a detailed narrative report that illustrates the findings of this task.
- 1.3.2 This report must also include a section on identified risks and propose mitigation solutions for each risk.
- 1.3.3 This narrative must include individual sections for each of the categories identified in the RFP including management philosophy, planning, risk assessment, staffing challenges, efficient and effective operations, and communications.

## 2 Task 2 Report

### 2.1 Introduction

- 2.1.1** As part of the evaluation, the consultant team has undertaken both a desktop review of information provided by the client and has visited various locations and vessels throughout the state of Alaska and interviewed ships' crews, terminal staff, senior and middle management. This approach allowed the TMG team to scrutinize ship operations and management, and to check and discuss the evaluation with available management and crew members.

### 2.2 Objective

- 2.2.1** Evaluate the adequacy of operational effectiveness and efficiency consistent with the objectives of AMHS. Review the use of resources, procedures, and practices at AMHS to determine if goals and objectives are being met in the most effective and efficient manner. Assess the internal control environment of AMHS regarding managing and mitigating inherent risks.

### 2.3 Background and History

- 2.3.1** The Alaska Marine Highway System (AMHS) is a branch of the Alaska Department of Transportation and Public Facilities (DOT&PF). It operates along the southwest and southcentral coast of the state of Alaska, the eastern Aleutian Islands and the Inside Passage of Alaska and Canadian province of British Columbia. Ferries serve many communities that have no road access, and the vessels transport people, freight, and vehicles between communities and to highways. AMHS's 3,000 nautical miles (5,600 km) of routes go as far south as Bellingham, Washington State in the "lower 48" of the United States, and as far west as Unalaska (Dutch Harbor), with a total of 32 terminals throughout Alaska, BC, and Washington State. AMHS is part of the National Highway System and receives federal highway funding. It is also the only method of transportation of vehicles between the state and the contiguous United States, not requiring international customs and immigration.
- 2.3.2** In fiscal year 2021, AMHS had a total operating budget of \$111.3 million. Of this, 70% was spent on personnel, 13% on fuel, 12% on services and commodities, and the remaining 5% on vessel travel and miscellaneous other expenses.
- 2.3.3** AMHS is an example of a passenger shipping line offering a regular scheduled service for the primary purpose of lifeline transportation<sup>1</sup> of passengers, although visitors and some residents are traveling for leisure or recreation. AMHS voyages can last many days but, in contrast to the luxury of a typical cruise liner, cabins cost extra and most food is served cafeteria-style at extra cost. Passenger services for such long sea voyages are basic, even if a cabin is purchased.

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<sup>1</sup> "Lifeline transportation or service" is an internationally used generic term indicating a service (road, rail, air and sea) to remote islands and territories where a population might be cut off from normal mainland services, such as health care, schooling, business, domestic farm animal movement and visiting friends and relatives etc. Such service is usually provided by government run services or funded services by a private operator acting under license.

- 2.3.4** The forerunner to the AMHS was the Chilkoot Motorship Lines, founded in 1948 by Haines residents. The company used a converted World War 2 Landing Craft Tank (LCT). The company operated a weekly service from a harbor north of Juneau to Haines and Skagway, connecting the territorial capital to the highway system. Chilkoot Motorship Lines was purchased by the Alaska government and moved under the Territorial Board of Road Commissioners in 1951. In 1957, the LCT was replaced by the MV **Chilkat**, which remained a part of the system until being decommissioned in 1988.
- 2.3.5** In 1959, Alaska achieved statehood and voters approved an \$167 million (in today's money) bond issue to improve the ferry system throughout the Southeast and Southcentral regions. The package included four new vessels and new docks. The first of the new vessels built was the MV **Malaspina** (now sold and laid up as hotel and museum vessel in Ketchikan), followed closely by the MV **Matanuska** and MV **Taku** (this vessel was sold and eventually scrapped in 2015). With three new ships, and a new name, the Alaska Marine Highway System (AMHS) was established.
- 2.3.6** The following year, the SOLAS ocean certified MV **Tustumena** was completed and the MV **Chilkat** moved to Prince William Sound. In 1969, AMHS service expanded with the addition of the MV **E.L Bartlett**, which was in service with the state until 2004.
- 2.3.7** In 1967, two events severely restricted transportation to and from Southeast Alaska. A land slide destroyed the Alaska Highway to the North, and the BC Ferries' MV **Queen of Prince Rupert** ran aground, severely limiting transfer passengers' ability to move between the AMHS southern terminus of Prince Rupert, BC and Seattle, WA. Until this time, portions of the passage between Southeast Alaska and Washington State were classified as outside waters (ocean-going), and none of the vessels the AMHS operated in Southeast Alaska had the necessary SOLAS certification required to carry passengers on outside waters. The Governor of Alaska, citing the need for a transportation link between Alaska and the continental US, ordered the AMHS to send a vessel south to Seattle while putting a request to Congress to re-classify the route as inside waters. The federal government agreed, which left the AMHS with a significantly longer route system, but no new vessel to serve it.
- 2.3.8** Faced with the lengthy construction time and cost of building a new vessel, the AMHS looked overseas to find a quicker solution. The MV **Stena Britannica**, just a year old, was purchased and rechristened the MV **Wickersham**. While the new vessel was relatively inexpensive to purchase, and could be added to the system quickly, she was never re-flagged as a US ship. Hence, commercial operation between US ports of call was a violation of the US Merchant Marine Act of 1920 (commonly known as the Jones Act), and the Passenger Vessel Services Act of 1886 (or PVSA) codified at 46 USC § 55103 relating to cabotage of carrying passengers. These Acts do not permit domestic trading with cargo or passengers between US ports of vessels built outside the US. Such vessels must be built in the US, trade under the US flag, and be crewed with at least 75% US nationals with the remainder made of foreign nationals living legitimately in the USA. Initially, the State had thought that it would be able to get a waiver of the Jones Act for the **Wickersham**, but that request was blocked, severely limiting the scheduling flexibility of the ship. While the **Wickersham** could pick up passengers in Washington State and deliver them to Alaska if there were an intermediary stop in Canada, moving passengers within Alaska was not allowed. Additionally, as the **Wickersham** was not specifically built for Alaskan ports, she was limited as to which ports she could dock. The AMHS ordered the construction of the MV **Columbia**, which replaced the

**Wickersham** on the mainline Seattle route in 1974. The MV **Columbia** was not, however, built to SOLAS standards.

- 2.3.9** Facing the need to increase capacity, both the **Matanuska** and **Malaspina** were stretched by 56 feet, beyond the capacity of some of the smaller harbors and leaving the MV **Taku** as the only AMHS ship in Southeast able to serve some smaller communities. To serve the smaller communities of the region, the AMHS ordered the MV **LeConte** in 1974 and the MV **Aurora** in 1978. These would be the last new ships built for the AMHS for 20 years, ending the initial construction era of the AMHS.
- 2.3.10** In March 1989, the Exxon Oil company's tanker MV **Exxon Valdez** struck a reef in Prince William Sound. The State of Alaska's on-scene response was managed from the MV **E.L. Bartlett**, later relieved by the **Aurora**. Suction trucks were placed in the car-deck, temporarily converting the ferry into a spill response vessel. The State of Alaska determined a new response vessel was necessary, and the new vessel should be designed from the beginning to be able to take on a command-and-control role in the case of another disaster. Funded in part by settlement money from Exxon, the MV **Kennicott** joined AMHS fleet in 1998. New construction since the **Kennicott** has focused on day boats, which can run their expected schedule and return home within a 12-hour shift.
- 2.3.11** In 2004, the MV **Lituya** was added to the fleet to make the 16.5-nautical-mile (30.6 km) trip between Ketchikan and Metlakatla on Annette Island (subsequently the vessel now runs between Ketchikan and a new purpose-built terminal to the northeast of the island reducing the route to 6.9 nm (12.7 km)). A new road was built from Metlakatla with federal funds appropriated for the building of the new Ketchikan airport on Gravina Island opposite Ketchikan. With a design heavily influenced by oil rig supply vessels, she is unique among the fleet with an open car deck and limited passenger facilities. Costing only \$14 million in today's money, her low fuel consumption and small crew make her the most economical vessel in the fleet, giving the AMHS real-world data on the effectiveness of small, short-haul ferries in Southeast waters.
- 2.3.12** In 2019, a labor strike involving over 400 members of the Inland Boatman's Union (IBU) of the Pacific shut down the AMHS for several days between July 24 and August 2. This strike, the first one the AMHS had seen in 42 years, led to a \$3.2 million loss in revenue and reimbursements and was resolved with federal mediation. AMHS was further hit with loss of revenue in 2020 - 2022 when the international pandemic of COVID-19 caused lockdowns.

## 2.4 AMHS Routes

- 2.4.1** Southeast Alaska: The Southeast route system is divided into two subsystems: the mainline routes, which typically take more than one day for the ship to travel; and shorter routes where the vessels depart their home port in the morning, travel to destination ports and then return to their home port on the same day. The shorter routes are commonly referred to as "day boat" routes.
- 2.4.2** The mainline routes carry a high percentage of tourists in the summer and provide service between Bellingham, WA, or Prince Rupert, BC (though not currently doing so), and Skagway. En-route, the ships stop in Ketchikan, Wrangell, Petersburg, Sitka, Juneau, and Haines. The smaller communities, such as Kake and Hoonah, are served by some mainline sailings. The three largest AMHS vessels (when in service) are used



on the Southeast mainline routes. These are the MV **Columbia**, MV **Kennicott** and MV **Matanuska**.

- 2.4.3** Day boat service is also provided on the North Lynn Canal route during the peak summer season by MV **LeConte**. This route provides round-trip service between Juneau, Haines, and Skagway. The day-boat routes connect the smaller communities of Southeast Alaska with each other and with Southeast Alaska mainline communities (Ketchikan, Petersburg, Wrangell, Sitka, Juneau, Haines, and Skagway) that serve as regional centers for commerce, government, health services, and/or connections to other transportation systems. The day-boat routes primarily serve local residents and include Angoon, Hoonah, Gustavus, Kake, Metlakatla, Pelican, and Tenakee.
- 2.4.4** Two AMHS vessels provide service on the day boat routes. These are the MV **LeConte** and the MV **Lituya**. The MV **Lituya** is dedicated to providing day boat service between Ketchikan and Annette Island. The Southeast system connects with the continental road system at Bellingham, WA, Prince Rupert, BC (when operational), and in Alaska at Haines and Skagway.
- 2.4.5** Cross-gulf service: When the MV **Kennicott**, a vessel certified as SOLAS compliant to operate in open waters, joined the fleet in the summer of 1998 the ferry system expanded to include regular cross-gulf sailings. Also known as 'inter-tie trips,' these sailings connect Southeast Alaska with the Southcentral and Southwest regions of the state. All cross-gulf trips include a stop at the port of Yakutat, a community that it is served only on cross-gulf sailings.
- 2.4.6** Southwest Alaska: The Southwest system serves Prince William Sound, Kodiak Island, the Alaska Peninsula, and the Aleutian Islands. The MV **Tustumena** provides regular service between Kodiak, Port Lions, Seldovia, and Homer. Between April and October, the MV Tustumena sails out to the Aleutian chain once a month to Unalaska/Dutch Harbor, stopping at Chignik, Sand Point, King Cove, False Pass, Akutan, and Cold Bay. This voyage is not made in the winter because of expected adverse weather conditions. Service in Prince William Sound to Valdez, Cordova, and Whittier is provided by the MV **Aurora**. The MV **Kennicott** provides supplemental service. AMHS also provides approximately 55 stops to the village of Tatitlek and 36 stops to Chenega Bay (service levels are contingent on annual funding). Tourist passengers add a significant percentage to Prince William Sound traffic in the summer, especially between Valdez and Whittier. In the winter months when traffic demand is significantly reduced, and weather conditions worse, the service is withdrawn.

## 2.5 Ports and Terminals served by AMHS

- 2.5.1** The Alaska Marine Highway's main hub is in Juneau (Auke Bay), though administrative offices are in Ketchikan. Other smaller operational hubs include Cordova (Prince William Sound), Ketchikan (southern Panhandle), and Kodiak (South Central).
- 2.5.2** The AMHS serves the following communities: Akutan, Angoon, Bellingham, WA, Chenega Bay, Chignik, Cold Bay, Cordova, False Pass, Gustavus, Haines, Homer, Hoonah, Juneau, Kake, Ketchikan, King Cove, Kodiak, Annette Island, Ouzinkie, Petersburg, Port Lions, Prince Rupert, BC., Sand Point, Seldovia, Sitka, Skagway, Tatitlek, Tenakee Springs, Unalaska/Dutch Harbor, Valdez, Whittier, Wrangell, and Yakutat.

## 2.6 Current Fleet

### 2.6.1 From smallest to largest as of November 2022.

- MV **Lituya**, solely dedicated to serving the Ketchikan-Metlakatla (Annette Island) route. In service.
- MV **Tazlina**, the newest Alaska-Class vessel and the first AMHS ship built in Alaska. She is currently laid up at Auke Bay Terminal, Juneau. She is said to have crewing problems. The vessel was built as a day vessel and has no crew accommodation.
- MV **Hubbard**, the first Alaska-Class vessel built, never entered service, and is currently undergoing fitting out of crew accommodation in Ketchikan.
- MV **Aurora**, operates in Prince William Sound. In annual refit, Seward.
- MV **LeConte** serves the feeder communities in the northern Southeast as a day boat. In service.
- MV **Tustumena**, serves Southcentral and Aleutian Island communities. Currently in service. *This is an Ocean-Going classed vessel that can operate in open waters.*
- MV **Matanuska**, is SOLAS certificated and operates mainline throughout Southeast Alaska, frequently beginning in Prince Rupert, and occasionally running to Bellingham. In annual refit in Ketchikan.
- MV **Kennicott**, operates mainline throughout Southeast Alaska, frequently beginning in Prince Rupert and making cross Gulf of Alaska voyages to Southcentral Alaska once a month. *This is a SOLAS and Ocean-Going classed vessel that can operate in open international waters.* In service.
- MV **Columbia**, operates mainline voyages throughout Southeast Alaska, usually beginning in Bellingham. The vessel has been dry-docked and laid up since 2020. She is currently serving as a hotel ship for AMHS staff in Ketchikan. Due to CPP problems she is unlikely to enter service again until May 2024.

### 2.6.2 The working fleet consists of two vessels which can work the Southwest routes of AMHS.

### 2.6.3 All vessels are named after Alaskan glaciers.

## 2.7 Alaska Class Ferry Design History

### 2.7.1 The Alaska Class Ferry (ACF) design has a complex development history. Uncertainty regarding the operational needs of the ACF, primarily whether it should be limited to a 12-hour operational day or be capable of routes that exceed 12-hours resulted in numerous design study reports (DSR), and changes in planning. (In the discussion below all cost estimates are provided in the year that the design was completed.)

### 2.7.2 A vessel design study was submitted in 2004 to AMHS by EBDG. The study estimated that a new mainline ferry design could be completed for up to \$120 million a 2004 value. The analysis also identified that a bare hull renovation of an existing mainline vessels could be completed for approximately 10-25% less.

### 2.7.3 In 2006 EBDG was selected to design the Southeast Shuttle Ferry. A focal point of design was consideration of whether the new vessel had to be a stern/bow RORO or a stern/side RORO vessel. As a complex, non-conventional door design was chosen, construction estimates were \$50 million above those of the previous vessel design and

construction would have taken two more years. A separate Southern Gateway Shuttle was simultaneously considered.

- 2.7.4** Subsequent discussion on the need to serve different ferry routes, increasing fuel and crew costs, regulatory complexity, and environmental considerations resulted in the decision to consider vessels that could serve all AMHS routes. In 2008, the AMHS focused on vessels that could serve all routes, and a new multi-purpose design was developed in 2009.
- 2.7.5** In 2012, the multi-purpose design was reconsidered and costed at up to \$167 million. The price was considered high, and the decision was made to consider a simpler vessel, a Day Boat, not designed for longer trips to be used on the Lynn Canal between Skagway, Haines and Auke Bay. In 2014, two Day Boat hulls were laid.
- 2.7.6** One of the two vessels (**Hubbard**) entered a Federal Capital Improvement Program to add crew quarters to the two vessels and is scheduled to enter revenue service for the first time in May of 2023. The other ACF (**Tazlina**) is scheduled to be taken out of revenue service in 2023 for crew quarters additions.

## 2.8 Operations Review and Questionnaire

- 2.8.1** The TMG team has extensively investigated the operational management of AMHS by carrying out interviews with shore management (senior and middle management) and sea staff either face-to-face or via video link. The team has also read and digested numerous reports, AMHS manuals, instruction notices, etc., and conducted both internally and externally relating to the management of AMHS. In general, interviews were based on an approved DOT&PF questionnaire produced by TMG. Interviewers ensured that the interviewee was anonymous, and no record was kept of name, rank, rating, or position.

Number of AMHS vessels visited		8
Number of manned terminals visited		4
Deck Officers and Ratings interviewed.		10
Engineer Officers and Ratings interviewed.		7
Passenger Services and Catering Officers and Ratings interviewed.		4
Terminal Staff interviewed.		6
Shore Managers including Yard Managers	Seniors Managers interviewed	5
Shore Managers including Yard Managers	Middle Managers interviewed	29
Total Number of Shore and Sea Staff Interviewed		61

Figure 1: Description of Staff Surveyed

- 2.8.2** In July and October 2022, the Consultant's staff travelled to Alaska and visited AMHS staff on vessels, in ports and offices, and conducted a staff survey. This included a kick-off meeting with the Transport Commissioner, Deputy Transport Commissioner, DOT&PF staff and senior staff of AMHS. The results of the survey are provided in Appendix D. They are extensive and detailed. The Consultant's staff went over the surveys with AMHS staff in-person to obtain responses. Fig 2 below provides a snapshot of the types of findings that the survey provides.
- 2.8.3** The 12 questions are listed below. Responses show that there are many issues outstanding in the view of AMHS staff. Referring to these questions alone, we can see the following: -
- Staff do not have annual assessments in many cases.
  - Many with assessments do not think they can comment on these.
  - Staff question the utility of the assessments.
  - Many (44%) doubt they have promotion prospects.
  - The majority believe they have limited promotion opportunities.
  - Staff have mixed views on their remuneration package but like their overall contract.
  - A high percentage (21%) said they receive no training or receive no on-board training (26%). (The perception of no training is concerning, although some orientation and instruction is likely happening.)
  - A strong majority (63%) are not happy with on-board facilities for off duty time.
  - Only a little over half (53%) view security on-board as adequate.

#### Staff Questionnaire sample

	YES	NO
10. Do you have annual assessments from your senior officer?	21%	79%
11. If Yes, do you have opportunity to comment and mitigate any adverse comment?	63%	38%
12. If Yes, do you consider that the company take any notice of the assessment?	50%	50%
13. Do you consider your promotion prospects are good?	56%	44%
14. Do you consider that promotion prospects are limited?	60%	40%
15. Are you satisfied with your remuneration package?	47%	53%
18. Are you satisfied with your contracted package?	84%	16%
21. Does the company provide you with training?	79%	21%
23. Do you have on board training?	74%	26%
31. Are you happy with on board facilities for relaxation/time off duty?	37%	63%
35. Do you consider security aboard is adequate?	53%	47%

Figure 2: Sample of Questionnaire

- 2.8.4** This is just a sample of the total questionnaire conducted, and the responses raise many questions. A more detailed look is shown in Appendix D; however, the full questionnaire response is attached as an Excel Workbook to this report. Further surveys/questionnaires may be needed to clarify and improve on these results.

## 2.9 Product Offer

- 2.9.1** The TMG team visited eight ships of the AMHS fleet, three of which were in service, the others undergoing refit or were in long term layup. The most disappointing observation

to the team was the poor product offered to passengers, when comparing it to overseas ferry companies of a similar size and service.

- 2.9.2** There appeared to be limited effort given to provide a “passenger experience” as a person would expect from a hotel, vacation resort, or restaurant. Food outlets were poorly staffed with limited offerings.
- 2.9.3** The only alcohol or beverage outlet was seen on the MV ***Kennicott***, but even this had limited offerings, selling only limited supplies of bottled beer.
- 2.9.4** There were no retail outlets seen, either aboard vessel or in terminals apart from vending machines offering cold drinks, water, and snacks. There was no gift shop on any of the vessels or at any of the terminals. A lost opportunity for a) making additional revenue, b) showing off local products for sale and thereby enhancing tourism, c) improving the ridership experience.
- 2.9.5** Aboard the long-range vessel there was no entertainment apart from a cinema showing an Alaskan tourism film. This was presented twice during the three-day voyage from Ketchikan to Bellingham. The only other entertainment sighted were board games and jigsaw puzzles. One poorly presented electronic chart display on two of the ships indicated the position of the vessel and speed.

## **2.10 Passenger Accommodations**

- 2.10.1** The passenger accommodations seen were clean and tidy. Overnight cabins were clean and presentable with ensuite bathrooms/showers. Alleyways were clean, the decks well-polished.
- 2.10.2** However, the whole look of the vessels, including those built in the late 1990s and this century, had the look of passenger vessels from the 1970s. They were drab and uninspiring in décor and certainly did not have the “Wow” factor that can be found on most overseas ferries, especially in the Baltic, UK/Ireland, EU (including the Mediterranean), Australia and New Zealand.

## **2.11 Uniforms**

- 2.11.1** The TMG team had been repeatedly informed by middle management ashore that uniforms should be worn by ship and terminal staff. An allowance is made to all staff to purchase their own uniform. However, during the team’s visit there was little evidence that uniforms were being worn, apart from some Purser staff, and in one instance, a deck officer.
- 2.11.2** The wearing of uniforms (provided they are clean, correctly worn, and presentable) not only presents the company as a disciplined organized entity but is also a safety and security matter. During an emergency, passengers (who may not be familiar with a ship’s routines) will look to ship staff for guidance and help. Should the crew be indistinguishable from passengers, confusion will occur. During one ship visit, the captain of the ship was taking the TMG representative to the vehicle deck prior to disembarkation. Both were stopped by passengers who said they were pushing into the line. When the Master explained that he was the captain, only then would the passengers let him through.

## **2.12 Communications**

- 2.12.1** With global digital communications now available to most of the earth's population, it is surprising that passengers aboard AMHS vessels are generally unable to communicate to persons ashore (family or business) via Wi-Fi or other internet connections. Modern European ferries even supply a business center where passengers can carry on business while aboard and at sea.
- 2.12.2** A large prestigious ferry company operating 38 large RoPax and Ro-Ro ferries in Europe, the United Kingdom and Ireland, over a network of 2,500 nm (a similar operating distance to AMHS and in similar terrain) has recently fitted an up-to-date, state-of-the-art fast internet system to 32 ships of its fleet. This connects all ships and terminals to the networks' high-speed network, throughout the operating area of the company, which will be of benefit to the shipping company ship's staff, ship's passengers, and terminal staff alike.

## **2.13 Security**

- 2.13.1** AMHS appears to comply with the International Ship and Port Facility Security Code (ISPS). However, certain observations were made during the Consultant's visit which were highlighted in the Questionnaire.
- 2.13.2** Terminals: All Terminal staff questioned indicated that, as far as they were aware, they complied with ISPS on the seaside. However, the interviewees indicated that they were less than happy with security arrangements landside, and it appears that some break-ins have happened while the terminal is locked down at night. The AMHS terminal on Annette Island has the barest of security seaside (a padlocked gate at the bank-seat end of the roadway loading ramp, the gate easily climbed over or knocked down) and the vessel is laid up there every night without a watchman aboard. Access could easily be made to the vessel and/or the moorings cut, and the vessel allowed to float free of the berth. This terminal does not have to comply with ISPS but there is still an expensive asset that could be compromised.
- 2.13.3** Masters and mates of vessels expressed concern about on-board security. Some said that a state trooper in uniform deters some rabble rousers. Others would welcome a security officer. Others said that having bars aboard would encourage drunkenness and it would be hard to police.
- 2.13.4** The TMG were not conscious that Boarding Card Regulations were being complied with in all cases.

## **2.14 Benchmarking against Foreign Ferry Shipping Companies**

- 2.14.1** Before proceeding further with this synopsis, it has been noted in the past that other international government-operated ferry services also appeared to have suffocating overarching bureaucracy, not allowing the ferry company to develop, and policy changing with every change of government. This, unfortunately, not only occurs in ferry operations but most modes of transportation.
- 2.14.2** The Consultant quotes below some other overseas nationalized ferry companies that have been in similar situations to AMHS and been moved to other governance models and in some cases no longer require government subsidies. This has been achieved by



either selling off the nationalized ferry company to a private operator, contractually obligating the operator to maintain a given lifeline schedule in return for a diminishing subsidy or selling owned ferry ports without subsidies but licensed to operate over a given number of years.

**2.14.3** The first instance is the small NorthLink Ferry Service operated by Serco Limited (a UK listed company), running five medium size ships on the lifeline service between Scotland and the northern isles of Shetland and Orkney. The company was originally operated by privately owned P&O Ferries Limited under licence to the UK government (Scotland Office). When devolution took place within the UK, the new Scottish government decided to nationalize the service and place it under the management of Caledonian MacBrayne Ferries Limited, a wholly government owned company, controlled by the Scottish Department of Transport. EU laws (as they stood in 2012) demanded that such lifeline services must be put out to tender, under fair competition ruling. Four private companies, plus the incumbent David MacBrayne Limited., were allowed to bid for a six-year contract to run the Northern Isle services under contract with reviewed subsidies depending on the fiscal viability of the company.

**2.14.4** The final winner of the bid would be allowed to re-build the company through aggressive marketing, fiscal prudence, strict operational and administrative management, and scaled back bureaucracy. Serco Limited won the bid, and with collaboration with the unions restructured the company. This allowed for individual senior ship masters and chief engineers who held a budget for each ship and became responsible for the general maintenance of the vessels. HR was contracted out to an offshore personnel company. Sea staff time served aboard was generally limited to two weeks on and two weeks off, though a senior Chief Officer/senior 2nd Engineer Officer alternated between his/her rank and acting as Master/Chief Engineer Officer, to allow the senior staff of these ranks time ashore for administrative work and to cover leave and sickness. Vacation (leave) was additional to the two weeks off. Time aboard was strictly controlled to STCW standards. Shore bureaucracy was cut to a minimum and placed under a department manager. Shore management worked closely with on-board ship management using the most up-to-date communications methods and technology. Changes and updates were made to the passenger accommodation while the ships remained in service. Aggressive marketing was actioned in collaboration with the Orkney and Shetland Islands Tourist Boards. Within a year of operations, the new slimmed down company was profitable having grown ridership beyond lifeline services and increased reliability to 98%. The economies of both Shetland and Orkney grew with additional tourism. This was achieved by offering superior standards of accommodation, food and alcoholic drink



Figure 2 Refurbished area aboard a NORTHLINK ferry (circa 2012)

outlets, and on-board entertainment. Reaching this standard also required robust marketing from both the ferry company and the island tourism boards.

**2.14.5** The service contract was bid again in 2019, with Serco winning another eight-year contract, mainly on the backing of the islanders of Shetland and Orkney, who praised the reliable, superior, and punctual service they were receiving. The only other company which bid was nationalized David MacBrayne Limited.

**2.14.6** In 2015, the nationalized service of Hebridean and Clyde lifeline ferry services were put out to bid. This service was being run on behalf of the Scottish Government by David MacBrayne Limited. Serco once again made a bid, the only other company running being David MacBrayne. Serco's bid was not opened by the Scottish government, who declared it was non-conforming. The state of the Hebridean and Clyde ferry services today is one of late or non-sailings, major breakdowns and unexpected dry dockings, poor passenger service and expectations, poor crew morale, and lack of communication between sea staff and management. All very similar to the AMHS today.



Figure 4: Utility quality passenger accommodation in a CalMac ferry

**2.14.7** In 1984, the UK Government ran all Irish Sea, North Sea, English Channel, and Isle of Wight ferry services under SeaLink UK including the Isle of Man Steam Packet Company. These services under the incumbent government were part of the nationalized rail services that owned ports and associated hotels and spas. The services were put out to competitive bid and the Anglo-American shipping and container company Sea Containers, Inc., of Bermuda won the contract, taking ownership of 50+ ships, 11 ports and 3 hotels/spas. At the same time, Sea Containers also purchased the nationalized high speed craft ferry service Hoverspeed Limited based in Dover, UK., with 5 large RoPax hovercraft. The Company shipping and container leasing operations



were already run from a London HQ and the ferry and port operations continued to be run from a SeaLink HQ based in London.

- 2.14.8** A new management structure was set up regionalizing the ferry services and placing ship management with the ships. Older ships were taken out of service and placed in layup ready for disposal. New tonnage was chartered in, and plans made for new builds. The company was bought for UK£86 million and sold 10 years later for £280 million and this did not include the ports, hotels, the Isle of Wight services, Hoverspeed Limited or the Isle of Man Steam Packet shipping line. A programme of upgrading vessels to meet passenger expectations was undertaken and a massive marketing programme launched to attract tourist traffic, which was in collaboration with regional and national tourist boards in England, Scotland, Wales, Ireland, and France. The ferry services are still running profitably under the banner of Stena Line.

## **2.15 AMHS Management Philosophy, Operating Style, and Risk Assessment Practices**

- 2.15.1 Philosophy.** Heard from many employees/managers within AMHS:

*“We keep the ships running for as many days as we have budget for.”*

- 2.15.2** AMHS has a mission statement, although a report in 2016 recommended it be streamlined and modified. The mission statement is “the Alaska Marine Highway System is to provide safe, reliable, and efficient transportation of people, goods, and vehicles among Alaska communities, Canada, and the “Lower 48,” while providing opportunities to develop and maintain a reasonable standard of living and high quality of life, including social, education, and health needs.”
- 2.15.3** In interviews, the management philosophy of the system was frequently described as “We keep the ships running for as many days as we have budget for.” In contrast with the aspirational mission, the philosophy is operations-oriented rather than customer service-focused. Currently, the AMHS has no means of measuring the final points in this motto (such as “reasonable standard of living”). An AMHS economic impact study was completed in 2016 but had limited analysis of social and environmental measures.
- 2.15.4** In most organizations, management philosophy is defined through a Strategic Plan or Vision Statement, and a review like this would compare the operations with the Vision Statement. AMHS has neither a Strategic Plan nor a Vision Statement, though the consultant team understands that a Long-Term Planning exercise is being organized.
- 2.15.5 Planning and Management.** Planning is critical to capital intensive transportation organizations because the infrastructure is too expensive to be updated on an annualized basis. For example, the DOT&PF manages the Alaska Aviation System Plan (AASP), a “long-term strategic planning process.” “The system plan feeds aviation specific information to the Alaska State-wide Long-Range Transportation Plan and meets the state and federal requirements for system planning<sup>2</sup>. The DOT&PF also has the Alaska Statewide Long-Range Transportation Plan & Freight Plan, Alaska Moves 2050. The State also has modal plans, but not one for AMHS.

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<sup>2</sup> AASP Fact Sheet, January 25 2021.

**2.15.6** It appears that the following standard transportation organization planning documents do not exist for the AMHS: -

- Department modal or system plan for ports and/or the ferry system -- although they exist for other modes of transport managed by the state.  
(see [https://dot.alaska.gov/stwdplng/areaplans/modal\\_system/index.shtml](https://dot.alaska.gov/stwdplng/areaplans/modal_system/index.shtml)).
- 20-year capital plan and/or system master plan (AMHS projects are included in the DOT&PF STIP (State-wide Transportation Improvement Program) program, but this is a list of funded projects and is not comparable to a long-term capital plan)
- Five-year business plan
- Marketing plan that is focused on market and revenue development as well as marketing expenditures (which is the current focus).

**2.15.7** AMHS management lacks core plans to guide its spending, management, and decision making. All operations, capital, and other decisions at AMHS are made on an annual basis.

**2.15.8** In discussions with AMHS and DOT&PF, it appears that financial planning is caught in a “vicious cycle” assumption. In other words, people argue that operations cannot be improved because there is not enough revenue. As this assumption is taken for granted, the potential for revenue development or cost reductions is not considered in an analytical manner. However, the TMG Team has not seen analysis completed to show that demand is being satisfied, that revenues are maximized, or that costs are reasonably managed. The current Marketing Plan is primarily a listing of media strategies and spending. A more robust marketing plan would consider how to increase both revenue and ridership using demand for services and ongoing trends.

AMHS has not completed a demand analysis related to where passengers are travelling and how often they want to travel or set up formal advisory committees with the communities it serves. In its place, the AMHS Scheduler has regular conversations with communities, requests information about community events online, and solicits feedback on draft schedules. AMHS also conducts online customer satisfaction surveys, which are sent via email following completion of a trip. However, these do not meet current standards of obtaining customer demand / satisfaction information for planning purposes.

### **Washington State Ferries Planning Case Study**

Washington State Ferries (WSF) also operate within that state's Department of Transportation. As with other aspects of state transportation, WSF has integrated capital and operations planning. While its internal planning is more complex, an overview of WSF's planning can be seen on its Planning Publications web page, <https://wsdot.wa.gov/travel/washington-state-ferries/about-us/washington-state-ferries-planning/planning-publications>.

On this page are links to: -

- An overview and fact sheet A fleet guide
- System statistics
- On-time performance statistics
- The Covid 19 restoration plan
- 2040 Long Range Plan
- Sustainability Action Plan
- Asset Management Plan
- Origin-Destination Survey results
- Annual Financial Statements

The WSF also provides public information on ongoing vessel improvements and capital projects.

The WSF's long range plan was developed in line with State Legislature 2007 Legislative Directive (ESHB 2358) which provided guidance for ferry system planning.

It is recognized that WSF and AMHS are quite different systems and not readily compared, but a significant level of planning is anticipated with a capital-intensive organization such as a ferry system.

**2.15.9** Marketing. AMHS is not looking at the business opportunity as it relates to market demand, revenues, social benefit, or economic impact. There is an assumption that the service is required, but the opportunity is not addressed in a systematic, data-driven manner.

**2.15.10** A robust marketing and development approach is required to 1) identify business opportunities and revenue; 2) examine it, considering the segments within the opportunity (tourists and resident travel, for example), 3) develop a strategy for maximizing the benefit, considering how to offer services to obtain the highest good for the lowest cost, and 4) plan how to consistently improve the service offering, provide benefit to Alaska, and increase demand for its services.

**2.15.11** The need for a market-oriented approach is discussed above under planning and below under communications. However, these sections do not provide a comprehensive discussion of the critical elements of a Marketing Plan, which should include the following components:

- Market strategy. A strategy for maximizing revenue, growing demand, and maximizing benefit. Continuing to exist year after year is not a strategy. Modern passenger transportation is always focused on customer service.
- Branding. What does the AMHS promise? Given the current desire to re-examine the service, it is a good time to re-examine AMHS branding. This includes understanding the value-proposition that the AMHS offers to its market.
- Demand analysis. Who are the clients? When and why do they travel? What do they want from the ferry service that is not offered now?

- Travel segment analysis. A subset of demand analysis – tourists, remote island dwellers, and businesses utilizing the ferry do not want the same services. Is the service addressing all its travel segments? Who is not getting what they need?
- Price analysis. Is the fare structure reasonable? Where are increases, or decreases, appropriate? What is the rationale for fees?
- Quality assurance process. How does AMHS ensure that the quality of its product is consistent and desirable? Who is responsible for this?
- Competitive insight. In the case of a lifeline ferry service like AMHS, aviation is one competitor, but another competitive option for people is to move and no longer need to use the ferry system. Is the service supporting the region or is it a drag on development?
- Distribution strategy. Is the ticket distribution method effective? The Consultant recognizes tickets are not sold in a timely manner for certain tourism markets, and that the website is not considered user friendly. What are the improvements required to the distribution system to maximize passenger experience, usability, and revenue?
- Communications. Determine channels to communicate with passengers and communities to maximize impact and reach.
- Marketing Plan. This is incomplete, but combined these elements become a Marketing Plan, a plan with goals, deliverables, and measure targeted on growing the market and increasing revenue

**2.15.12** Elements of the marketing plan may only need to be updated every five years – especially if market and economic conditions are consistent.

## **2.16 Risk Assessment**

**2.16.1** Risk in a ferry shipping company and marine risks are covered in the Task 4 report with Fiscal risks being covered in Task 5. This section concentrates on Commercial risks. Such risks extend beyond the regulatory risks identified by statute and government to include risks to reputation, morale, and even feasibility.

**2.16.2** Public companies are required to discuss risk factors to operations and results in their annual reports. These types of discussions include current trends leading to risks such as pandemics, financial loss, fluctuations in demand for services, geopolitical uncertainty, access to capital, and fuel costs. AMHS produces an Annual Financial Report but it does not include a comparable risk assessment, and high-level commercial risk assessment of AMHS as a system does not appear to exist. The Consultant developed a high-level risk assessment tool to consider how high-level risks might be viewed from an executive perspective. In addition to annual reports, transportation companies manage risks through long range planning, risk registers for specific operations, and compliance with federal and state regulations.

**2.16.3** In their job descriptions, AMHS Managers are assigned specific risks to monitor, primarily compliance risks. However, compliance risks are only a small part of the risk

faced by transport and shipping operating companies such as AMHS. Risks such as changes in the economy (local, state, national, and global), travel demand, fuel prices, inflation, and the job market are proving to be more immediate and impactful and are not clearly covered in the job descriptions of senior management.

**2.16.4** In this project, marine vessel operational risks were reviewed by the TMG Team in the Task 4 report. Their conclusion is that the AMHS is generally in compliance with its regulatory obligations. The team did however note the following areas where considerable improvements are recommended:

1. Communications throughout the AMHS appear to be of poor quality, untimely, and often never occur at all. In interviews with staff, they almost uniformly commented on the poor quality of internal communications, especially between ships' staff and office staff.
2. Managers onboard the vessels were repeatedly identified as an opportunity for improved leadership, communications, and training.
3. Fleet and Engineering Management structure. Revisions to the structure are recommended to improve the quality of work, enhance leadership and communications, and reduce total capital costs. Details are in the Task 5 Report.

**2.16.5** Additionally, the accounting practices of AMHS were reviewed by a CPA from Elgee Rehfeld. The accounting analysis made two recommendations relevant to risk in the Task 5 report discussion: -

1. AMHS should incorporate a higher level of risk analysis in the operational budgeting process.
2. AMHS should fill its planner position. This is elaborated on in Task 5.

## **2.17 Efficient and Effective Operations**

**2.17.1 Organization Structure and Governance.** AMHS sits within the DOT&PF. The Transportation Commissioner is responsible for AMHS via a Deputy Commissioner. An AMHS General Manager reports to the Deputy Commissioner. The AMHS Business Enterprise and Development Manager is tasked with communicating AMHS financial performance and its operations to the Legislature and the public.

**2.17.2** AMHOB. The governance system is in transition with the Alaska Marine Highway Operations Board taking on its role: -

*"The Board provides recommendations regarding the state-wide transportation improvement program. The Board provides input on the short-term plan and a comprehensive long-range plan for development and improvement of the Alaska marine highway system."*

**2.17.3** The Board consists of the Deputy Commissioner of Transportation and Public Facilities and eight public members – one union representative, one Alaska First Nation organization representative, and six public members. Of the last six, two are appointed by the governor, two by the Senate Speaker, and two by the Senate President. At this time, the long-range plan has not been created.

- 2.17.4** The most important role of AMHOB appears to be providing input into a comprehensive long-range plan as this should guide all development and operations. When the new plan is developed, AMHOB should be directly involved in its review and development.
- 2.17.5** The AMHOB replaces the Alaska Marine Highway Transportation Advisory Board (MTAB). The legislation established a stronger governance role and planning responsibility than the former advisory board held.
- 2.17.6 Positions of Accountability for Financial and Operational Results.** AMHS is led by four senior managers: the General Manager, the Marine Operations Manager, the Marine Engineering Manager, and the Business Enterprise & Development Manager. All other managers report to the General Manager. An overview of each of these roles is provided below, based on the job descriptions. The complete responsibility specification of these managers is provided in Appendix B.
- 2.17.7** The structure is top-down bureaucratic organization that is heavy on administration without accountability. The departments seem to work in silos with little or no interaction or communication.
- The General Manager is responsible for “the Alaska Marine Highway System with direct oversight and management of Marine Engineering, Marine Operations, Business Enterprise & Development, and Safety Management. The General Manager has direct supervisory responsibility for employing, promoting, transferring, disciplining, and adjudication of AMHS employees.”
  - The Marine Operations Manager “provides common policy direction and administration in leading the Operations component, consisting of 9 AMHS vessels and over 400 employees, the largest component within the Alaska Marine Highway System. Act as a subject matter expert for vessel management, onboard passenger services, vessel safety and security, crew training and dispatching, environmental and regulatory operations of the AMHS fleet through the departments supervised. Exercises substantial supervisory authority over a significant cross section of employees and programs within AMHS...”
  - The Marine Engineer Manager “provides policy direction and administration of the marine engineering design, construction, and maintenance programs for nine Alaska Marine Highway System (AMHS) vessels and 21 shore facilities through 28 ashore staff and 83 licensed vessel operating engineers. Directs new vessel construction, vessel modernization and annual Capital Improvement Project (CIP) maintenance programs.”
  - Business Enterprise & Development Manager “directs the daily administration and financial management of AMHS’ Finance, Budgeting, and Accounting Sections, in addition to coordinating the annual audits of all funds, analysis of existing and proposed legislation and representing the division at the Marine Transportation Advisory Board meetings and Legislative hearings. This position also oversees the daily administration of Terminal and Reservations Center operations as well as Marketing...”
- 2.17.8** The roles are primarily operational. Only the Marine Engineer Manager has responsibility for a planning function, planning within the DOT&PF State Transportation

Improvement Plan (STIP). None of the job descriptions include the broad role of strategic or business planning. These roles are not named but appear to sit under the Business Enterprise & Development Manager. The General Manager is primarily responsible for Human Resources-related issues, but the role has very broad responsibilities.

**2.17.9** While there is no Human Resources Manager within AMHS, during interviews the consulting team was advised that several middle managers thought that up to 50% of their work time (and in one case 80%) was given to personnel related issues such as staffing or responding to grievances.

**2.17.10 Adequacy of Internal Controls.** Internal communications are poor and disconnected, and internal controls are therefore fragmented. Several points below describe the issues and complexities related to internal communications and controls:

- The vessels have no or poorly connected Wi-Fi systems, so employees cannot easily communicate with shoreside operations. Staff have no personal connections.<sup>3</sup>
- Shoreside managers, such as the Passenger Services Manager, are responsible for some crew on-board but often do not hear of issues requiring attention until after vessels have returned to port and the employees have started their shore break<sup>4</sup>. The Manager cannot easily communicate with employees when they are on their off duty break or when they are serving on-board vessels, making follow-up difficult.
- In the interview process, managers commented that the preference of employees appears to be to work problems out through the grievance process rather than informally with managers.
- Managers and ship captains do not have annual budgets to operate within. They therefore have to apply and justify even relatively small expenses, even if it is an ongoing one such as toilet paper.
- One shoreside manager described relationships with on-vessel staff as hostile. It is difficult to work with people or manage internal controls with limited communications and adversarial relationships.

**2.17.11** Other points can be made, but the pattern of awkward communications and weak internal controls appears clear.

**2.17.12 Centralized versus Decentralized.** On an organization chart, (see Appendix A) the AMHS appears to be centralized (as stated in 2.10.2 above) with clear reporting lines to the GM. In contrast, conversations with staff revealed the organization appears

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<sup>3</sup> Even before the Covid-19 pandemic and its well-documented impact on seafarer welfare, the provision of onboard crew connectivity was becoming a priority for shipping companies worldwide. Nevertheless, the Seafarer Happiness Index for the first quarter of 2022 found that crew well-being had sunk to its lowest level since the Index was founded in 2015. With limited access to a “basic internet connection” cited as a primary cause for this decline, it is clear that more needs to be done to improve working conditions at sea. The recent inclusion of mandatory internet access in the **Maritime Labour Convention** (which the USA is not signatory to at present) is a positive development, providing regulatory support to calls for enhanced crew welfare. Yet even aside from fulfilling regulatory requirements and moral obligations to employees, companies have much to gain from offering high-quality onboard connectivity. “With consistent access to communication, entertainment and other online services and connection with families and friends ashore in their spare time, crew are less likely to feel isolated and mentally fatigued, allowing owners and operators to benefit from a more motivated and productive workforce. This, in turn, supports safer and more efficient vessel operations. Crew connectivity has emerged as a competitive differentiator, with the offer of high-speed internet helping companies to attract and retain the best talent.

<sup>4</sup> Note this is not annual vacation. Crews work as a rule, two weeks on and two weeks off tours of duty. Annual vacation (leave) is taken separately.



decentralized with many employees thinking they are operating only with their immediate team (i.e. in silos), and with limited communications between different departments of the organization. Interviews with maritime and terminal staff completed for this project identified that “perceived lack of transparent and effective communications between both ship/terminal and shore-based managers.”

**2.17.13** The sense of decentralization is increased because many of the key functions of AMHS exist within DOT&PF or the Alaska Department of Administration (DOA) rather than AMHS. For example, many Human Resource functions are provided by the DOA, which administers finance, personnel, labor relations, leasing of space, central mail distribution, property management, risk management, procurement, retirement and benefits programs, information, and telecommunication systems. The DOA fulfills this role for most state departments.

**2.17.14** AMHS functions that sit wholly or partly within DOT&PF and DOA include human resources, administration, IT, payroll, marketing, and others. These roles help support AMHS with human resource pinch points – for example, when AMHS needed staff to help attract new employees, DOT&PF staff were utilized. While AMHS is part of DOT&PF, employees within AMHS appear to regard these as “contracted” services rather than employees on the same “team,” and when there are joint projects relations between AMHS, and DOT&PF staff appear to sometimes be strained.

**2.17.15** In interviews managers spoke of difficulties reaching employees from many different perspectives: -

- Inability to reach employees while on-board vessels.
- Gaps while employees were on shore breaks.
- Some managers commented that unionized employees often perceived they worked for their union rather than the AMHS.

#### **DOT&PF-AMHS Interactions**

While AMHS-DOT&PF communications are often excellent, some examples of awkward interactions between the two organizations emerged (keeping in mind that the AMHS is a part of the Department).

In discussion with DOT&PF managers an interesting example of limited communications between two entities emerged. The consulting team spoke with the DOT&PF managers responsible for ADA and other human rights related compliance. When they file ADA-related reports on vessels, they are not submitted to AMHS. Also, the DOT&PF managers were not aware of ADA vessel audits that one of the consulting team members had completed for AMHS although they would be immediately relevant to their duties.

In another example, the AMHS depends on DOT&PF to manage funding via STIP grants, but as AMHS does not have a capital plan clearly it cannot clearly communicate its requirements for STIP in the direct manner that other DOT&PF units do.

## **2.18 Staffing Challenges**

**2.18.1** Like many North American transportation organizations, AMHS is facing an acute staffing crisis. For example, staff members are currently working long shifts, two vessels



(MV **Tazlina** and MV **Columbia**) are in layup simply because they do not have crew available to run the vessels. Shoreside, the engineering department is now without a single qualified port engineer. Other West Coast ferry systems such as the Washington State Ferries and BC Ferries are also facing staff challenges.<sup>5</sup> AMHS is unique however in that it has limited ability to respond because none of its four senior managers are responsible for staffing, the HR functions are largely outside of AMHS within the DOT&PF and DOA, and the AMHS appears to have limited ability to respond to a crisis.

- 2.18.2** The primary response of the DOT&PF has been to contract for recruiting support (through PeopleAK) and attend employment trade shows and conferences to encourage applications for entry level positions. A recent report from the recruiting contractor indicated that only four people were hired from a pool of nearly 250 applicants. While technical qualifications were a barrier for some applicants, AMHS is losing many potential employees due to a cumbersome application process and lack of timely communication once applications are initiated.
- 2.18.3** In addition, long-term solutions will require discussions and negotiations with the unions.
- 2.18.4** The State of Alaska has recognized that human resources are an issue requiring transition in general. In 2019 the Governor issued Administrative Order No. 305 to create clear reporting structures for employees, as reporting structures were confusing and often changing. To consolidate processes within the state, DOA HR has gone through an extensive process and is at the point shown in the figure below.

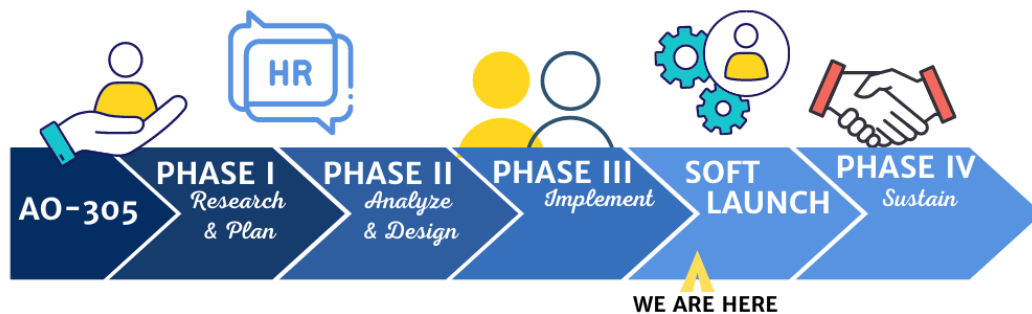


Figure 5: Status of State of Alaska HR Transition

- 2.18.5 Evaluation of Staffing Levels.** Transportation organizations in North America are generally short of staff coming out of the Covid -19 pandemic, including aviation, marine, bus and coach transit, and rail companies. Both Washington State Ferries and BC Ferries<sup>6</sup> have struggled with obtaining adequate and appropriate staff in recent years. Issues related to hiring include retirement by older employees, employees seeking jobs

<sup>5</sup> BC Ferries staff shortages were acute enough in 2022 to cause the cancellation of sailings on busy routes, and the company struggled to end the staff shortages. See "B.C. Ferries Struggles to Fill Staff Shortages," The Maritime Executive, 21 August 2022.

<sup>6</sup> Black Ball Ferries, Inc. of Seattle, WA, have not suffered the same problem by offering fair and reasonable wages, leave and other benefits, including keeping all staff on their books during the pandemic. This was all achieved through very good relations with the unions (same unions as WSF and AMHS). Unlike AMHS and WSF they do not have a recruitment problem.

that can be undertaken without travel, and an increased desire for employee-friendly workplaces and environments.

**2.18.6** Another analysis completed showed that across the organization in late 2021, AMHS was short-handed by 61 marine staff members. The diagrams below are taken from a late 2021 AMHS White Paper and display how employment has declined in recent years. Figure 7 shows hires by job category versus losses to resignation, retirement, and termination. Figure 8 compares employees hired per year versus those separated. In each year more employees left than joined the company.

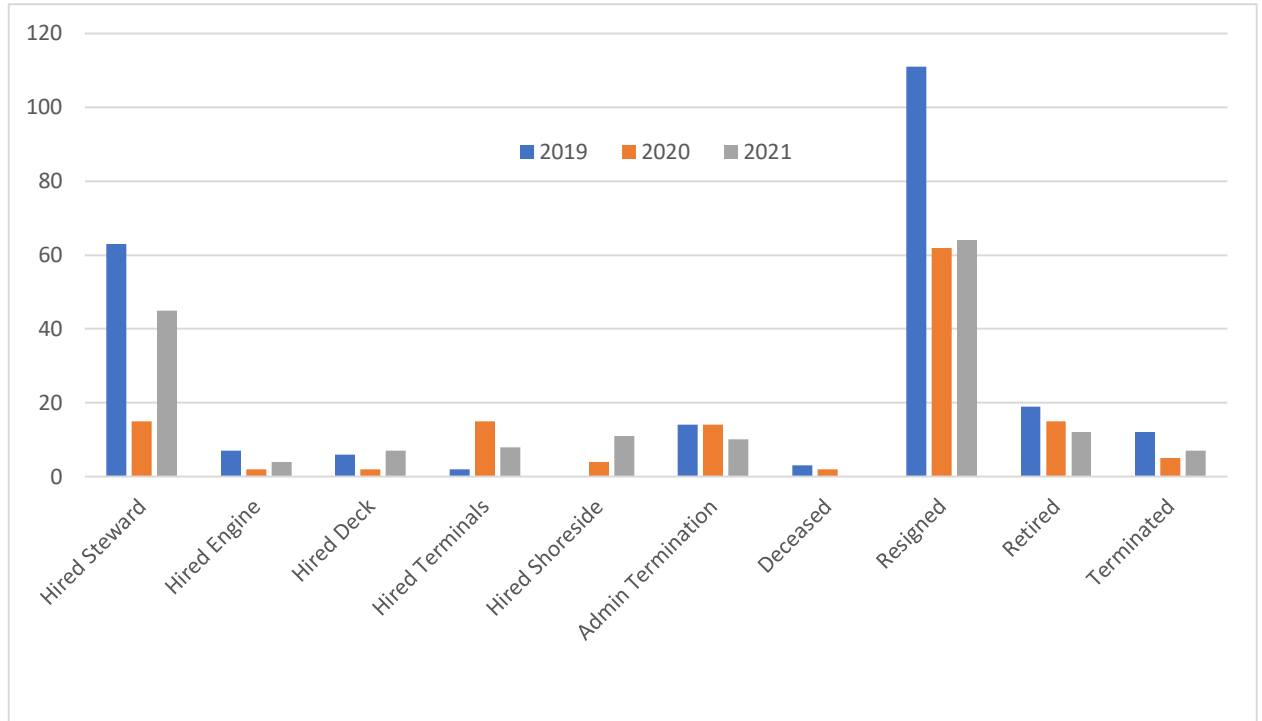


Figure 7: Hired versus Separated by Job Description, 2019-2021

Source: AMHS Staffing Shortages Extended White Paper, 2021

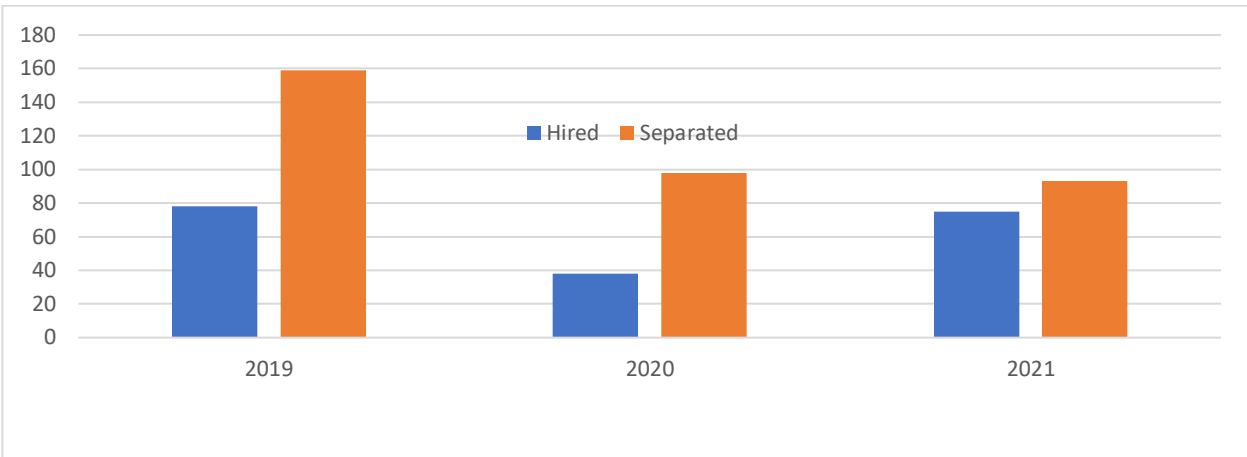


Figure 8: Total Hired versus Separated, 2019 -2021

Source: AMHS Staffing Shortages Extended White Paper, 2021

- 2.18.7** For much of the 2022-2023 winter operating season, two vessels (**Tazlina** and **Columbia**) were in layup because they do not have enough crew available. The shoreside marine engineering department is presently without a single qualified port engineer.
- 2.18.8** While it is agreed that AMHS is understaffed, it is difficult to put a precise number to the shortage because of internal issues, such as: -
- Uncertainty on the rate at which employees are retiring and resigning.
  - No clarity regarding whether entry level employees who have been offered positions will actually show up for work because after they have been accepted for which there is a potential position, they have to complete required sea, safety and other training which generally takes months. The Merchant Mariner Card (MMC) issued by the US Coast Guard alone generally takes up to four months to receive.
  - Internal vagaries regarding available crew. For example, the Dispatch Selection Form (DSF) which unlicensed AMHS employees fill in, is very complex and employees can choose not to provide services in many situations.
- 2.18.9** In the future, new vessels may potentially require lower levels of staffing, but this will not become clear for many years.
- 2.18.10** Adequacy of Skills and Training. AMHS has a training program supported by a training manager and support staff. They ensure staff have appropriate training and record courses taken. The focus is on providing training required to meet regulatory requirements.
- 2.18.11** As with the regulatory discussion above, some interviewees said AMHS employees have the required level of certification required for the roles they serve, and their completed programs are tracked in an AMHS database. Skills and training are a knife that cuts both ways. In interviews, staff have complained about the lack of training support that AMHS provides, but when AMHS trains employees, especially higher-level functions, they often leave for other opportunities either within AMHS or outside. The AMHS provides all training required by regulation for employees to undertake their

position, but the need for improved soft skills such as leadership training was commented on by some interviewees. Interviewees made it broadly clear that morale is an issue, helping employees improve and develop their skills and the culture of the organization would be an asset. Many organizations today provide support for employees seeking to improve their training in any manner.

- 2.18.12** A number of interviewees suggested that mentoring for new and junior employees would be valuable. However, in the case of vessel staff only other employees on the vessel could mentor them, but their direct reports are often not on the same vessel. Creating mentoring opportunities is therefore difficult.
- 2.18.13** An interviewee noted that new entrants to the organization do not understand how long it takes to reach high technical levels of expertise. For example, becoming a master mariner (master's license and command qualification) takes approximately 10 years. Some of this time is required at sea because trainees must have certain periods of experience before they can continue forward with the next stage of the training process, which will include college time and statutory examination. Seafarers must also undergo stringent medical examination to ascertain fitness for sea duty. During their sea time trainee and qualified deck officers will be expected to undergo stringent pilotage training and examination.
- 2.18.14** During the COVID-19 pandemic, two trends emerged simultaneously that made training of entry level employees difficult. The first was the shortage of employees requiring rapid new hires, the second was the inability to hold joint training sessions with all new hires making initial training difficult. In response, AMHS has moved to one-on-one online training. This has effectively gotten employees onto the boats but has resulted in a reduced level of training for new employees.
- 2.18.15** Now, entry-level employees start work with the knowledge of how to fill in the many forms required by AMHS and all legally required training but little else, including limited training on employee standards and customer service. The consultant was advised that AMHS is moving back to a one-week training program for entry-level employees to ensure that employees understand work expectations. The one-week training program also facilitates communication between mid-level managers, which was stronger before the pandemic.
- 2.18.16** The case study on Asset Management Operating System (AMOS) below describes how in many cases training is not required for systems within the AMHS.
- 2.18.17** Many deck officers get their pilot's license and then leave AMHS to join the Alaskan or Canadian Pilotage Authorities, whereby they work on the cruise ships during the summer and shoulder periods having about five months leave during winter when they disappear south to the lower 48 states or overseas. Conditions of service, pensions, leave accrual, and pay with the Alaskan/Canadian Pilotage Authorities are all much better than staying with AMHS.
- 2.18.18** Personnel Systems. AMHS includes marine employees from three unions, (MMP, MEBA and IBU), has numerous classes of employees, has to move employees' significant distances at times to make shift changes, and is a unique organization within a state department. The personnel system is therefore complex for a state organization, or pretty much any organization. The **MMP** is an International affiliated Organization of the International Transport Federation (ITF), based in London, UK, of Masters, Mates &

Pilots representing licensed professional deck officers; **MEBA**, is The Marine Engineers' Beneficial Association, representing licensed professional marine engineer officers and the **IBU** is the Inland Boatmen's Union of the Pacific, (both of which are also affiliated to the ITF) and representing unlicensed and qualified ratings. To give an example, the required staffing for the MV **Columbia** is 103 of whom 80 are IBU; twelve are MEBA; and twelve MMP.<sup>7</sup> All bargaining with the unions is handled by the DOA, and AMHS management has limited engagement with the unions or their representatives. As these are very unique collective bargaining agreements (CBAs) within the State of Alaska, it may be beneficial to the future of the AMHS if their management and negotiation was brought within AMHS management by managers who understood the complexity of marine operations. The collective bargaining agreements will have to be modified and agree with major changes proposed for the AMHS.

**2.18.19** This complexity of employee unions and classifications complicates the dispatching process as well. The 2017 EBDG AMHS plan noted that: -

"Dispatching is extremely complex with multiple contracts covering different crew levels and variable requirements by vessel, region, and crew component, and regular service versus community event support. With multiple crews, training requirements, vacation, etc., there are frequently 2-3 people per vessel position. Unscheduled vessel downtime impacts schedule reliability and flexibility."<sup>8</sup>

**2.18.20** Terminal staff are members of the State of Alaska government employees' unions, the Alaska Public Employees Association (APEA) and the Alaska State Employees Association (ASEA). Terminal operations have not experienced the same acute shortage of personnel that marine operations have.

**2.18.21** For passenger services, it takes about 3-4 months to get new staff processed and online from a starting point of a prospective employee applying for and obtaining their USCG documents to finishing with AMHS orientation for new hires. This assumes that the applicant is motivated to apply for and obtain their documents without delay. Per union contracts, schedules need to be made available for 30 days to bid on. Within the IBU, all promotions and positions are based solely on seniority. Thus, someone with no cooking experience can successfully bid to become cook on a vessel. Members of the MMP and MEBA have licensing requirements for promotion.

**2.18.22** Some facts and limitations related to this approach include: -

- Many entry level employees for vessels are hired as stewards. After gaining seniority these employees can apply for other internal postings. AMHS new hires are vetted by the Department of Administration (DOA), which ensures proposed employees meet legal requirements. The DOA is also responsible for payroll and other HR functions. Compared to other State of Alaska departments, the AMHS has a simplified hiring process. The HR professionals who are responsible for the AMHS have been moved between the DOT&PF and AMHS a few times in recent years as the system tries to address HR needs.

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<sup>7</sup> From an EBDG/MG 2017 Reform Study: "Dispatching is extremely complex with multiple contracts covering different crew levels and variable requirements by vessel, region, and crew component, and regular service versus community event support. With multiple crews, training requirements, vacation, etc., there are frequently 2-3 people per vessel position. Unscheduled vessel downtime impacts schedule reliability and flexibility."

<sup>8</sup> EBDG and McDowell Group, "AMHS Strategic Business and Operational Plan, Final Report," 2017.

**2.18.23** As a result of the complexity of the union agreements and seniority, employees often have questions/issues with payroll. This is an outstanding and intractable issue within the AMHS. According to interviews, AMHS has the highest rate of union grievances in the Alaska government. The Consultant's team have been informed that filing grievances is the preferred method to address issues. In FY 2019, AMHS marine employees filed 80 grievances related to pay, dispatch, contract interpretation, and discipline. Of these, 62 were filed by IBU members.

- The AMHS was authorized to pay new hires a \$5,000 signing bonus, but interviews reveal mixed reviews of the success of this approach. Existing staff expressed frustrations that new hires received money while existing staff did not receive a bonus.

## **2.19 Review Internal and Public Communications**

**2.19.1 External Communication.** The following section provides an overview of the key elements of external communication led by AMHS and DOT&PF communications and marketing team members. The department recently launched an expanded external communications program.

**2.19.2** In late summer 2022, the DOT&PF Commissioner's office announced its intention to communicate more openly with Alaska residents to build confidence, restore revenue, and recruit employees.

- "Charting the Course" was announced in September 2022 to enhance communications and build trust. Three phases include: -
  - "Stabilization" phase focuses on restoring staffing and vessel maintenance.
  - "Recovery" phase adds service levels.
  - "Full steam ahead" phase is fully functioning operations and growth.
  - Department communications about the program included press releases, media interviews, website, conference presentations, and advertising.
  - Updates were to be provided regularly regarding staffing levels, vessel condition, and financial health.
- An advertising campaign was deployed in fall 2022 with a core message of State of Alaska commitment to AMHS: -
  - Full-color, half-page advertising was placed in Alaska newspapers stating "AMHS IS HERE TO STAY!" with subheading "The State of Alaska is invested in the Marine Highway."
  - Messaging emphasized commitment to coastal communities, investment in the fleet, and aggressive recruitment effort.
  - Readers were encouraged to apply for AMHS positions.
- Recruitment efforts were expanded in 2022 to meet staffing demands as the system returned to more normalized service levels.
  - AMHS recruitment efforts have been augmented by DOT&PF communications staff and other state agencies including DOA.
  - The AMHS website promotes employment opportunities.

- A new 10-minute recruitment video was produced, highlighting the unique work environment, advancement opportunities, and employee benefits. Media communications are coordinated through the DOT&PF Commissioner's Office, primarily through the Communications Director and Public Information Officer.
- Public alerts are available through several opt-in systems (including publicinput.com and gov.delivery). The systems have different capabilities to target audiences. A single unified approach should be considered.

**2.19.3 Trip Planning and Booking.** An overview of key travel planning and booking resources is provided below. AMHS recognizes marketing efforts must address the needs of two distinct audiences, Alaska residents and visitors: -

- Residents typically have detailed knowledge of their destination and are more familiar with the AMHS booking process. Residents often travel to hub locations for meetings, shopping, medical and personal appointments, and transportation connections including jet airline service and highways.
- Visitors typically need to be educated about how to travel via ferry as well as their destinations. Planning and booking timelines among visitors can be months, and occasionally years, in advance.
- AMHS develops an Annual Marketing Plan with detailed marketing strategies and expenses.

**2.19.4** Resources available to plan and book travel include the following: -

- Website: The website provides information about the ferry system, communities accessed by AMHS, a searchable schedule, and an online booking platform. The schedule can be searched by month and location. Until recently, a potential traveler had to initiate a reservation to get fare information. If traveling with a vehicle, information about vehicle make and model was required early in the process. This has been moved to a later stage of the reservation process. The reservation system does not have a complete list of all vehicle options, creating some frustration for customers.

Schedule: In prior years, the summer schedule was available by early fall and the winter schedule available by mid-summer. The winter schedule, starting October 2022, was not available until mid-September 2022. Bookings were not possible until the schedule was released. AMHS began soliciting comments on the summer 2023 schedule in mid-January.

- Reservation office: Personal assistance is available during business hours; however, the office is understaffed. Travelers are encouraged to utilize the website for schedule information and bookings. This service could potentially be provided by employees or contractors anywhere in the world.
- Terminal staff: Ticketing and other information is available from customer service staff at the terminals when vessels are in port.

- Social media is used by marketing and communications staff to encourage travel on the ferries and to communicate with the public about issues. Personalized communication is needed to reschedule travelers when sailings are delayed or cancelled.
- Vessel Tracking System: The online system provides real-time information about vessel location, next destination and estimated arrival time, and communities served by AMHS.

**2.19.5 Policy Makers.** AMHS-related communications with policy makers are discussed below. The Task 5 Report includes more detailed analysis of AMHS budgeting and financial reporting processes.

- The Alaska Marine Highway Operations Board (AMHOB) was established to advise AMHS management and provide input to planning. Several DOT&PF staff members assist with meeting logistics and coordination, provide AMHS information, and facilitate the planning process.
- AMHS is required by statute to submit an Annual Financial Report to the legislature. Reports are available to the public on the AMHS website and include an overview of the operating schedule, revenues, expenses, and historical trends. (More discussion about the budget process and financial reporting is provided in the Task 5 Report.)
- AMHS is incorporated in the DOT&PF budget process, which is initiated mid-December with publication of the Governor's budget. The Legislature convenes in January to develop operating and capital budgets for the upcoming fiscal year and consider legislation: -
  - Departmental budgets are reviewed in budget subcommittee before budgets are released. The House and Senate also have Transportation committees, which address matters concerning AMHS and other transportation systems.
- Communications between AMHS, DOT&PF, Governor's Office, and legislators are coordinated through the Legislative Liaison in the Commissioner's Office.

**2.19.6 Consistency of Messaging.** Consistency of messaging is a significant issue. The AMHS message is continually changing, in large part due to regular turnover in the Governor's Office, Commissioner's Office, and legislature. As a result of these ongoing changes, there are significant swings in AMHS' strategic direction, vessel design and capabilities, budget levels, and service levels.

**2.19.7 Strategy.** As the ferry system strategy is unclear, it is no surprise that the communications are also unclear. Ties to the corporate mission and management philosophy are missing.

**2.19.8 Controls.** Controls on communications are lacking. Roles such as the Business Manager and Scheduler use isolated systems for critical communications functions and are reliant on institutional memory. There is a lack of documentation about approach, methodology, and succession planning. As with most of the ferry system, individual systems are not tied together, making financial and operational reporting cumbersome, and managers appear to work largely in silos.



**2.19.9 Internal Communications.** Internal communications are briefly summarized below and are discussed in more detail in the Task 4 Report.

- Communication is frequent between dispatchers, operations managers, and vessel employees. Communications between vessels and shoreside staff is much more limited, and staff report frustration with the response timeline.
- Internal website is managed by the internal AMHS marketing team and is used to provide schedule, notifications, safety bulletins, and training information.
- The AMHS Employee Manual provides high-level information applicable to all AMHS personnel.
- An internal department-wide newsletter is on hold. It previously included employee profiles and operational updates. In the past, Washington State Ferries (WSF) had a weekly newsletter from the CEO which addressed employee questions and was judged to have been effective in communicating with employees.

## **2.20 General Comments**

**2.20.1** The Alaskan and US government have made significant investments in the AMHS over many years. However, it should not be a blank check. There appears to be overwhelming Alaskan public support for extra investment, but there is considerable public scepticism about the AMHS' ability to turn those resources into results.

**2.20.2** The Consultant recommends that there needs to be honest and realistic debate about the challenges ahead for AMHS and tough decisions that need to be made. To the question: Where has all the funding gone? There is a clear answer: it has gone into propping up failing maintenance reliability of the ships and augmenting failing services that AMHS has needed. Any lifeline transportation service should first consider the needs of the public who they are serving and offer service that is safe, reliable, and punctual. Only on safety can AMHS say they are coming close to achieving this requirement. AMHS needs to look at improving its onboard services radically and offering a much better and superior service to its clients. It also needs to radically improve its marketing techniques by understanding demand and connecting with revenue targets.

**2.20.3** Thus, over time AMHS needs to move to a radically different type of operation, abandoning its old monolithic bureaucracy and replacing it with one that is devolved and decentralised, with far greater power in the hands of the ship's officers and crews.

**2.20.4** While AMHS' values are right, its structures are wrong. Too much of it still has the feel of the 1960s, 70s, and 80s, both for those working for it and those using it. Shoreside administrative management are run off their feet. Capacity problems lead to shortages of staff, especially sea staff and management services that are slow and unresponsive. Customers are disempowered, with little choice but to use other modes of transportation, notably by air using the very efficient Alaska Airlines, private floatplanes, private ferry services, and barge services (for transportation of vehicles). The whole organization is inert, toxic, and bureaucratic. Employees recognize the importance of the system, and many speak passionately about the need for change.

- 2.20.5** The biggest constraint the AMHS faces is shortages of capacity in reliable ships and recruitment of staff, especially sea staff. The ships are generally old, designed for specific routes and not interchangeable because of berth inconsistency, some having side loading facilities and others having bow or stern loading facilities. Only two vessels are built to SOLAS standard and can be used on the ocean routes. Others are built to US inland waterway standards in accordance with CFR 46, presumably to cut costs. Hence, as happens with other ferry companies with multiple ships, there is no interchangeability if a vessel on a certain route suffers a breakdown or accident. AMHS should not blame the age of its vessels<sup>9</sup> for unreliability, though this is undoubtedly challenging. Ferry companies throughout the world are operating good services with ships of similar age.
- 2.20.6** While AMHS is a public service, it would clearly benefit from private sector experience in how it spends its subsidies, how it uses IT, and how it fashions new procedures and pathways for maintenance of its vessels, procurement, passenger and catering services. Revenue development should be a prime target for AMHS. This can only be developed by offering superior services/experience to any tourist development (which will of course also aid local development and income). The better-off can pay more and should pay the market price of a good service. Rural and remote residents requiring basic transportation to access community services should be granted a subsidized fare.
- 2.20.7** AMHS need more funds -- or more importantly -- enlivened revenue to plan ahead, both short and long term. Staff, especially sea staff, need more say over the way their vessels are being maintained and the equipment they need to make their vessels more reliable, safer, and passenger/client centered. Masters and Chief Engineers of ships, given their own budgets, which in turn gives them direct control over standards of service and maintenance. AMHS needs to mobilize the small 'battalions' and give them freedom to innovate and change. AMHS need sea staff, shore staff, and local managers to be entrepreneurs and to be listened to (and if deemed appropriate, rewarded) by senior management. This decentralization should be provided in the context of clear plans and guidance provided by senior management.
- 2.20.8** Whenever possible, AMHS should decentralize and deregulate, ensuring it is not imposing any burdens that are not absolutely essential.
- 2.20.9** The Alaska State Government founded AMHS in the late 1950s; it was therefore constructed and run for the conditions of the 1960s. For citizens who mainly stood in lines for everything, and who had little choice or variety in either the public or private sectors. The AMHS does not seem to have developed from those days. The institution of the AMHS remains substantially intact, in its strengths but also its apparent inadequacy.
- 2.20.10** The AMHS today lives too much in the shadow of its own history. It is an organization in which government (both State and Federal) provides considerable resources but appears incapable of operating its vessels as a lifeline service or generating revenue to offset the subsidy provided.

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<sup>9</sup> Many ferry companies, especially in the Mediterranean are operating successfully with much older vessels than AMHS fleet. Black Ball Ferry line is operating a successful single ship operation with a vessel (MV **CoHo**), which was the older sister to MVs **Taku** and **Malaspina**, both taken out of service with AMHS.

**2.20.11** AMHS is not in a sustainable situation. In its current position it will either improve or decline. The notion that AMHS is in decline should be challenged. A good definition of decline is a refusal to talk about problems – let alone try to build something better.

## **2.21 Findings**

**2.21.1** The following are key findings from this analysis: -

1. Surveys conducted by the Consultant identified numerous concerns and issues experienced by employees.
2. The informal operating philosophy of AMHS is “We keep the ships running for as many days as we have budget for.” This is an operational rather than customer-focused philosophy.
3. Compared to comparable organizations the AMHS has little planning. There is no: -
  - a. Vision
  - b. Strategic Plan
  - c. Business Plan, including revenue-focused Marketing Plan
  - d. Capital Plan
  - e. Demand Analysis
  - f. Customer Consultation, in a methodologically sound manner
4. Risk assessment is completed for only those risks related to regulatory compliance. Risk factors related to issues like market conditions, fuel, unscheduled vessel maintenance, weather related downtime, human resources, governance, and other items not required by regulations are not considered in an ongoing and systematic manner.
5. None of the managers are tasked with strategic or business planning. The Marine Engineering Manager is responsible for planning within the DOT&PF STIP program.
6. Although the organizational chart makes the AMHS look like it is centralized, in practice people experience it as very decentralized, and most managers appear to work in small silos.
7. AMHS is facing a staffing crisis, and this may continue for many years based on demographic trends.
8. None of AMHS’s senior managers are responsible for staffing in their job descriptions. The General Manager is ultimately responsible.
9. Many personnel functions lie outside AMHS in DOT&PF and the DOA and focusing a response to the staffing crisis is therefore difficult. This is a concern as this difficulty will be ongoing.
10. While none of the managers are directly tasked as an HR manager, given the current personnel crisis they are spending significant amounts of time on HR, which appears to cut into their other duties.
11. The AMHS lacks consistency of messaging. Different managers produce communications materials with little coordination.

12. The slow, uncertain budget process means that schedules cannot be communicated to people until long after many travellers and companies have made planning decisions.
13. There are no controls on AMHS communications as generally expected in an organization of this scale.
14. Internal communications have been flagged by vessel staff as a major concern.

## 2.22 Gaps and Overlaps

**2.22.1** The analysis has identified numerous gaps with AMHS. For brevity's sake these are bulleted below including lack of: -

- HR focus or internal HR staff.
- Poor communications between vessel and shore staff.
- Lack of adequate supervision by shore staff (many middle managers unable to follow up aboard vessels as much of their time taken up with HR problems).
- Customer service orientation or marketing plan.
- Planning in general.
- Risk Assessment.
- Effective budgeting which would have to extend beyond one calendar year.
- Ship to shore communications systems.
- Management relationship with unions is poor and needs considerable improvement.
- Leadership in many roles.
- Staff employed in operational and engineering positions ashore should hold appropriate professional certification (i.e. Port Captains should be STCW II/2 Master License qualified and Port Engineers holding appropriate professional qualification as STCW III/2 Chief Engineer's license or a qualified Naval architect and considerable experience in seagoing or yard time.<sup>10</sup>
- AMHS restrained from chartering or building new tonnage built outside USA (where building costs are at least half of those in the USA) due to restrictions of the Jones Act 1920 (and amendments) and the Passenger Vessel Services Act of 1886.
- AMHS restrained from employing foreign national seafarers by the Jones Act and PVSA.
- Vessel construction of current fleet does not allow vessels to switch routes in times of unplanned downtime.
- Terminal berths and ramping not standardized, requiring vessels to be fitted with bow, stern and side ramps.
- Poor passenger product in vessels and terminals.
- Senior Management positions should be occupied by very qualified and experienced staff in the discipline that they are head of. It is unlikely that the General Manager would or should be an ex sea-going master or chief engineer unless they have had considerable experience in the positions of Port Captain/Port Engineer and have had considerable commercial experience/qualifications.

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<sup>10</sup> These should be senior positions ashore in middle management. To gain respect of seagoing staff the incumbents must have the relevant qualifications and have considerable experience in command, as Chief engineer of all classes of vessels in the fleet or if a naval architect had considerable yard time as a manager.

## 3 Recommendations

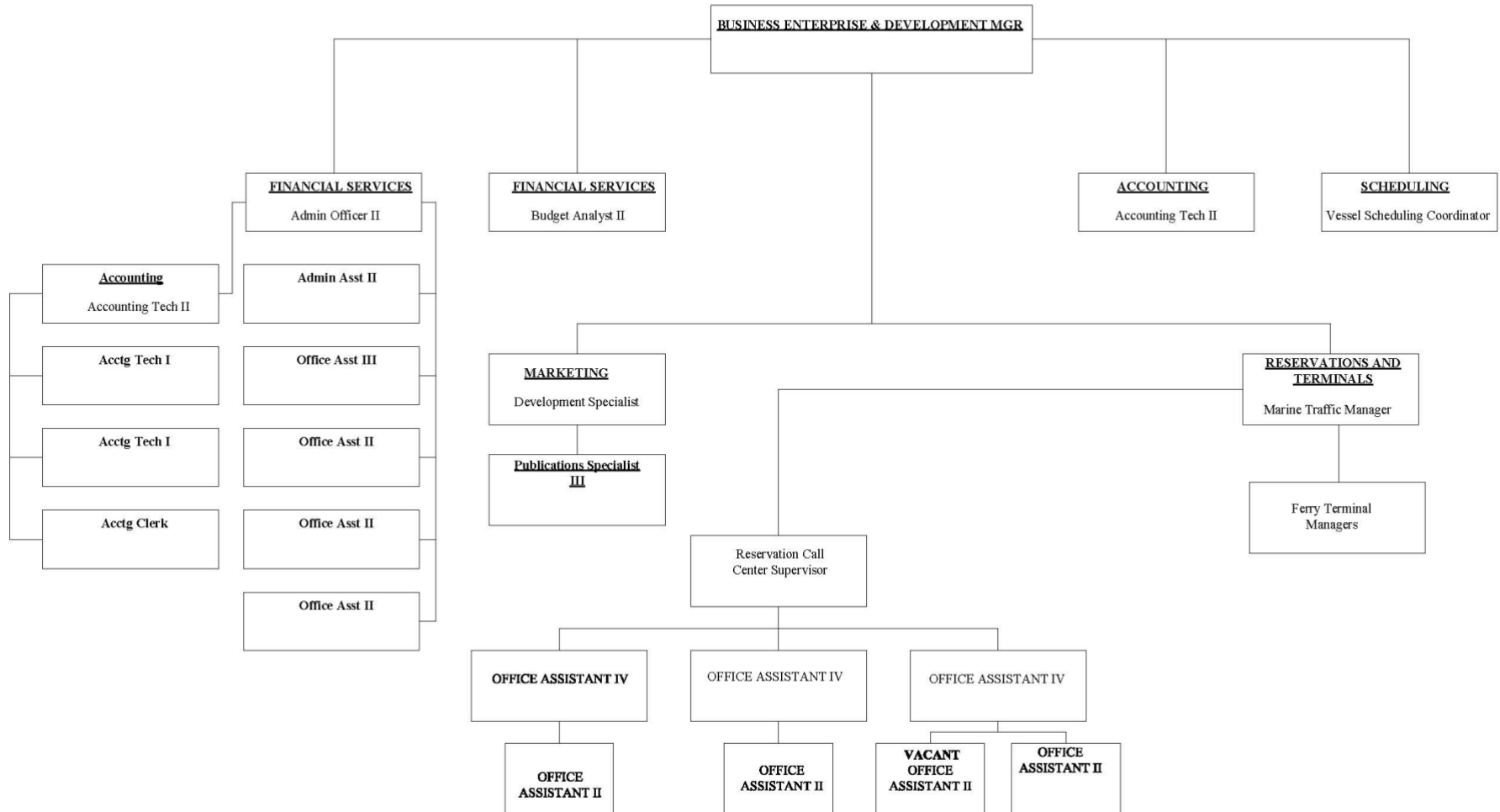
3.1.1 The following are recommendations from this evaluation (not necessarily in order of importance): -

- A. Re-evaluate AMHS organogram to represent a generic modern shipping company organization.
- B. Consider splitting management of vessels into two groups.
  - 1. Small inshore vessels (Day Boat & Shuttle Ferries).
  - 2. Mainline Ferries.
- C. When planning future vessels, consideration made that all mainline ferries should be built to SOLAS class for trading in open waters and internationally. This will allow for vessels to be sold on to either other USA companies, or on the world market when the ferry has reached company termination age of her life cycle. Currently there is no worldwide market for non-SOLAS ferry vessels, the only other alternative for disposal being scrapping.
- D. All Day Boat ferries should be built with crew accommodation, which will allow a 2 week on 2 weeks off shift pattern and should help with recruitment as crew members can live out of state.
- E. Future planning of vessels should allow for a 20-to-25-year life cycle, with major refits/upgrades at 5-year intervals.
- F. More detailed surveys of employees and customers is recommended to understand their transportation needs, concerns, and experiences.
- G. The AMHS should develop a: -
  - a. Vision which is focused on serving customers.
  - b. Strategic Plan.
  - c. Business Plan with a supporting Marketing Plan focused on revenue development.
  - d. Capital Plan.
  - e. Demand Analysis.
  - f. Formal Customer Consultation.
- H. A Manager within DOT&PF or the AMHS should be tasked with keeping AMHS planning documents updated.
- I. Task an AMHS senior manager with human resource responsibilities so that the significant issues the ferry system is facing can be more directly addressed and coordinated. HR should not interfere with other managers responsibilities. Ideally a human resources manager should be hired for the AMHS alone.
- J. Publish the schedule and open bookings by October for the following summer and by July for the winter. This would require the budgeting process to be completed earlier.
- K. Create an easier way to get rate and availability information (without having to create a booking).

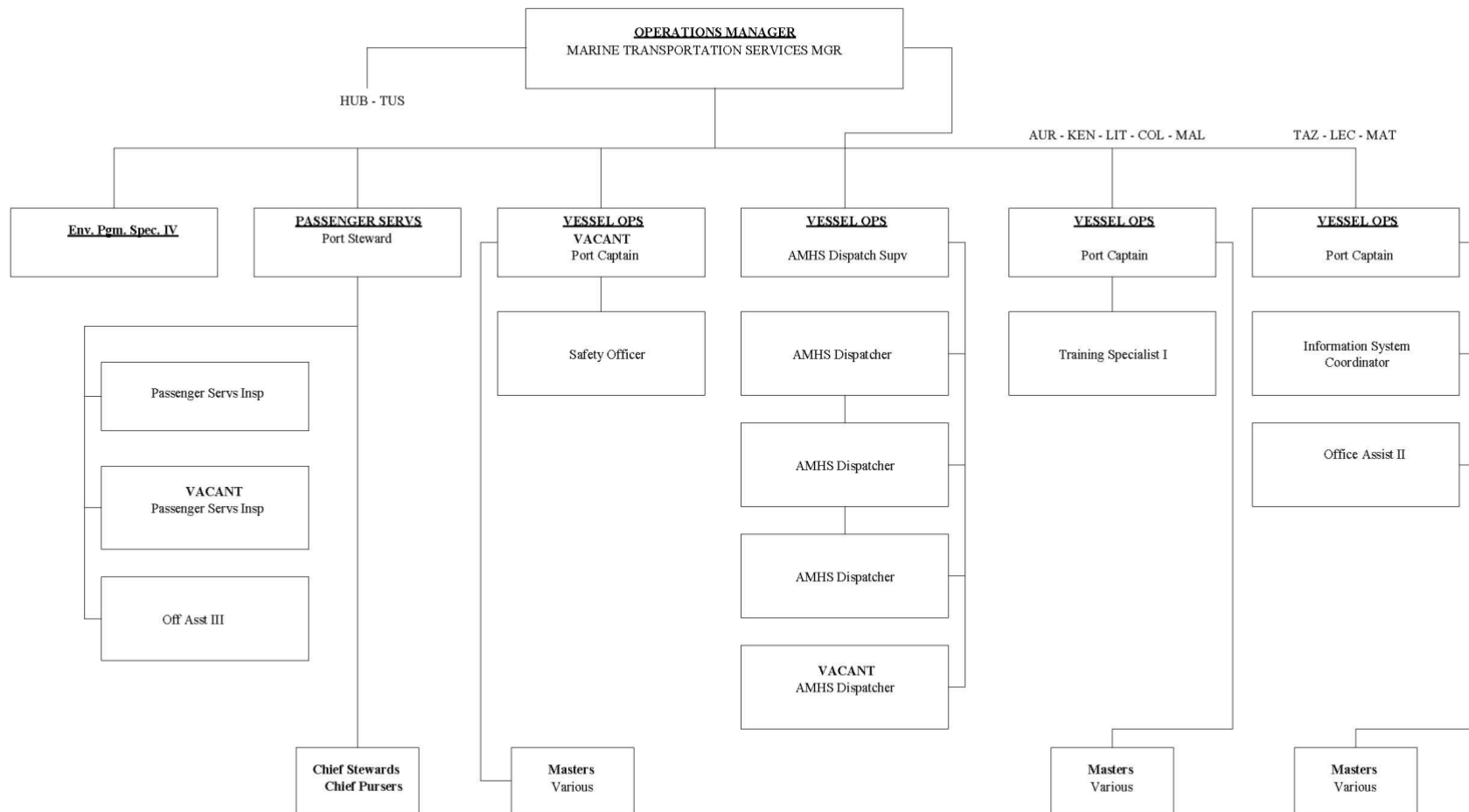
- L. Determine performance metrics that align with the mission, vision, and business plan.
- M. Incorporate revenue goals in marketing and business planning.
- N. Provide timely data and analysis to the management team including financial performance. This will require the integration of computer systems.
- O. Conduct market demand analysis and adjust service as needed to reflect changes in population, economic activity, and alternative transportation options. and revenue goals.
- P. Assign a manager to manage and guide all AMHS communications. These types of functions often report directly to the General Manager.
- Q. Streamline the AMHS application process and improve internal communication processes to increase hiring rate.
- R. Improve communications between vessels and shoreside staff. This communication issue may be more related to the management structure and functioning of the system.
- S. Incorporate internal technical expertise when planning required maintenance, inspections, and overhauls.
- T. Undertake an analysis of labour initiatives in line with the Washington State Ferries analysis.
- U. Continue monitoring and reporting process initiated with Charting the Course.
- V. Reinstate in-person orientation and training for new hires. Consider restoring the training assistant position or shifting responsibilities to appropriate staff in HR and onboard the vessels.
- W. Reinstate management meetings (previously called Chief's Meetings) to improve communications between ship and shore communications and with departments supporting AMHS.
- X. Provide onboard Wi-Fi to employees and customers to enhance training, ship and shore communications, and guest experience.
- Y. Base promotion on ability, experience, and seniority, not on seniority alone.
- Z. Activate a rigorous annual assessment program, policed by senior management.
- AA. Offer fair and reasonable remuneration and benefits to attract staff (especially sea staff) to come and work and live in Alaska.
- BB. In collaboration with unions, draw up contracts to hold staff who receive training to fixed periods or pay back of training costs if leaving before contract expires.
- CC. Enforce uniform regulations aboard all ship's officer ranks and ratings.
- DD. Move from having a uniform allowance to issuing standard uniforms.
- EE. Review security issues afloat and in terminals.
- FF. Create a unique web site for AMHS and bookings outside of the DOT&PF domain to improve customer experience.
- GG. Essential that AMHS/DOT &PF management work with the unions to re-vision the working relationship between management and staff.

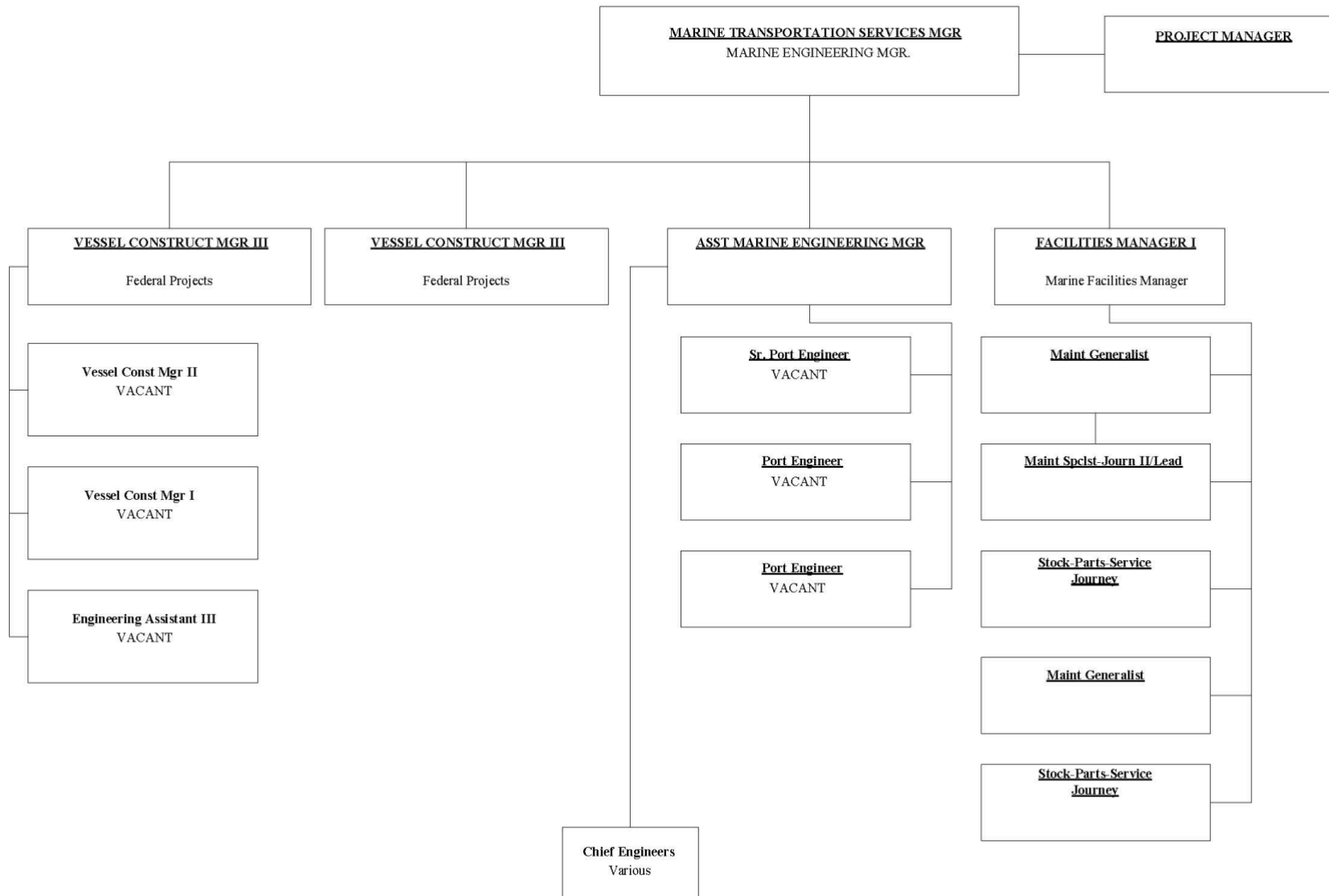
- HH. Employ Staff in operational and engineering positions ashore with appropriate professional certification (i.e. Port Captains should be STCW II/I2 Master License qualified and Port Engineers holding appropriate professional qualification as STCW III/2 Chief Engineer's license or a qualified Naval architect and considerable experience in seagoing or yard time.
- II. Poor passenger product in vessels and terminals. Consider upgrading passenger accommodation and public areas aboard vessels to modern international ferry standards.
- JJ. Consider retail outlets aboard vessels and in terminals.
- KK. Upgrade food outlets to a much higher class than that at present found aboard vessels.
- LL. Upgrade passenger experience aboard with enhanced entertainment, especially on long voyages.
- MM. Consider food and drink outlets in terminals.

# Appendix A AMHS Existing Management Organigram









## Appendix B AMHS Senior Managers Job Descriptions

The job descriptions of the four AMHS senior managers are provided in the following pages, as taken from State of Alaska Position Descriptions. They appear as **General Manager**, **Marine Operations Manager**, **Marine Engineer Manager**, and **Business Enterprise & Development Manager**.

Each job description has a detailed “Duties” section which describes the specific duties assigned to this role and the percentage of time the role should commit to different duties. The Duties discussion is detailed and extensive for each position.

### **General Manager**

#### **Duties**

Under the general administrative direction of the Deputy Commissioner, this position serves as the **General Manager** for the Alaska Marine Highway System with direct oversight and management of Marine Engineering, Marine Operations, Business Enterprise & Development, and Safety Management.

The General Manager has direct supervisory responsibility for employing, promoting, transferring, disciplining, and adjudication of AMHS employees.

**Functional Area Title:** Planning, Program, and Operations Management.

Have direct responsibility for the day-to-day management, and coordination of all operations of the Alaska Marine Highway System.

Directly responsible for an extensive 3,500-mile route system with 10 vessels that are designed to carry passengers and vehicles and coordinate stops in 35 ports serving: Alaska, Bellingham Washington State, and Prince Rupert British Columbia Canada.

Direct responsibility for the management of over 600 shipboard budgeted crew positions and over 130 shore side employees.

Directly responsible for the day-to-day operations at the Ketchikan Central Office, Marine Engineering Office, Reservation Call Center and all state-owned Vessel Terminals.

Direct responsibility for the oversight of annual vessel overhauls, vessel capital improvement projects, including maintenance, repair, refurbishment, and upgrade of terminal facilities in compliance with all federal and state regulations and requirements, in cooperation with numerous partner agencies.

Direct responsibility to ensure that all AMHS activities, and vessel operations are in conformity with all state and federal laws, regulations, standards, and policies, including the Department of Homeland Security regulations, EPA, & ADEC environmental regulations.

Assist the Deputy Commissioner with the organization and coordination of AMHS structure, programs, staff, and other resources.

Work directly with the State of Alaska Attorney General office regarding legal matters effecting the AMHS, also review and approve all invoices received from the Attorney General office.

Review and pre-approve all nepotism and ethics waivers before being sent the ethics officer.

Work directly with state Human Resources and Labor Relations personnel regarding union grievance response, letters of agreement, arbitrations, vessel collective bargaining agreements, personnel issues and other negotiations.

Serve as the contracting officer with delegated authority for construction-related

procurements for the AMHS, including commodities, equipment, services, and professional services for construction related activities.

Directly responsible for the development of vessel operating schedules. Directly responsible for all AMHS internal operating policies.

Work directly with the AMHS environmental officer to ensure that all environmental regulations are being followed in accordance with state and federal law.

Work directly with the safety management system coordinator to assure compliance with the program.

Make recommendations to the Deputy Commissioner regarding the development of the AMHS operating and capital budgets. Recommendations will include budget strategies, vessel operational weeks of service, and allocations of funds.

Review fiscal budget information and provide advice to the Deputy Commissioner to assure that AMHS is operating within budgetary limitations and state-wide policies.

Work with the Business Enterprise and Development Manager to review AMHS projections and take appropriate fiscal action to maintain budget control.

Ensure all supervisory responsibilities are carried out in accordance with federal, state, and departmental policies and applicable laws.

Evaluate AMHS for staffing needs and organizational effectiveness and planning for future agency requirements.

Oversee recruitment and selection efforts.

Review and preapprove all shoreside employee evaluations and assure that all evaluations are completed as required.

Oversee AMHS staff development through maintenance of current job profiles, career plans, and employee assessment strategies.

Mentor and coach employees.

Directly responsibility for AMHS employee performance by ensuring managers and subordinates understand expectations, have the tools, abilities, and knowledge to successfully perform their jobs, modeling desired behaviors, and identifying and resolving inadequate performance quickly and at the lowest possible level through counseling, developing improvement plans, and, if necessary, the discipline process.

Coordinate project and work distribution across AMHS sections.

Direct reports include: AMHS Safety Management Coordinator (25-3387), Administrative Assistant II (25-3478), Marine Operations Manager (25-3339), Marine Engineering Manager (25-3346), and Business Enterprise & Development Manager (25-3602).

The General Manager is responsible for representing, communicating, and coordinating with other government agencies, including the United States Coast Guard, American Bureau of Shipping, EPA, ADEC, Subcontractors, Shipyards, and Vendors working for AMHS.

The General Manager will work directly with the DOT&PF public information Officer regarding information and press releases, sent to the public.

Assist with legislative communication as needed.

Prepare required material for and participate in Marine Transportation Advisory Board meetings.

May be assigned other related duties.

## **Marine Operations Manager**

### **Duties**

This position provides common policy direction and administration in leading the Operations component, consisting of 9 AMHS vessels and over 400 employees, the largest component within the Alaska Marine Highway system. Act as a subject matter expert for vessel management, onboard passenger services, vessel safety and security, crew training and dispatching, environmental and regulatory operations of the AMHS fleet through the departments supervised. Exercises substantial supervisory authority over a significant cross section of employees and programs within AMHS. Authority to plan, organize, direct, coordinate, and control the activities and resources for the Operations component. Works closely with the Vessel Scheduler, Marketing Manager, Vessel Captains, Port Captains, Marine Engineering Manager (Marine Transportation Services Manager), Business Development Manager (Marine Transportation Services Manager), and Reservations staff to help develop and modify the operating plan and sailing schedules. Directs the implementation of policies, rules, and procedures for vessels to assure uniform compliance and economy of operations. Monitors and reviews costs to ensure that Ship Service operations comply with budget.

By exercising substantial independent judgement, establishes and revises policies, rules, procedures, and standards for vessel operations. Implements those policies, rules, etc. through shore side managers, specialists, and vessel department heads.

Utilizes independent judgment to determine safety, security, training, environmental, personnel, and regulatory needs of the organization.

In coordination with other System Managers establishes the number of annual weeks of operation based on operation funding, traffic needs and operational costs. Directs analyses of revenues and costs for use in

establishing capital expenditure priorities, tariff increases, scheduling policies, and labor needs as relates to passenger services and vessel operations.

Coordinates with the public, special interest groups, municipalities, and the news media regarding passenger services and community requests.

Acts as Designated Employer Representative for the organization and maintains federal compliance through the AMHS Drug and Alcohol Policy. Represents the organization when interacting with federal, state, and local entities and has authority to make decisions on behalf of the organization. Communicates with the public, customers, federal/state/municipal agencies, marine unions, and staff to maintain constructive and cooperative working relationships.

Renews vessel certifications and ensures tracking and delivery.

Participates in Bargaining Unit contract negotiations and Letter of Agreements when called upon from DOA to be a subject matter expert.

Assists in development and approval of ship maintenance requests.

Supervises, through subordinate supervisors and section chiefs, all personnel within the section, exercising substantial responsibility and control over

hiring, promoting, transferring, disciplining, and adjudicating grievances of subordinate employees.

Delegates authority and responsibilities, establishing appropriate review procedures and controls. Coordinates section activities with other units within the department, identifies potential organization and functional improvements and recommends them to the Director, is charged with minimizing duplication of efforts.

Through supervising Vessel Captains, Port Captains, shore side managers, and specialists, establishes and enforces policies and standard for performance duties and discipline for Captains, Chief Mates, Second Mates, Third Mates, Night Mates, Pilots, Boatswains, Able Bodied Seaman, Ordinary Seaman, Watchman, Porters, Chief Stewards, Second Stewards, Chief Purser, Senior Assistant Purser, Junior Assistant Purser, Store Keepers, Chief Cooks, 2nd Cooks, 2nd Assistant Cooks, Head Waiters, Mess Stewards, Cashiers, Dishwashers, and Stewards Utility's.

Overall responsibility for promoting the most competent and qualified candidates to senior vessel positions.

Supervise and direct the work of the following: -

- Three Port Captains who oversee the Vessel Marine Operations Section including all Vessels and oversight of Security and Safety Operations at the Terminals and central office operations administrative sections; One Vessel Services Manager who oversees the Passenger Services Section that also includes central office operations administrative sections.
- One Environmental Specialist who oversees all environmental matters for the entire organization which includes vessels, terminals, and the Central Office.
- One Dispatch Supervisor who oversees the Licensed and Unlicensed Dispatch Sections.
- Nine Vessel Captains if a Port Captain is not reachable or to fill in when needed, who oversee the entire command structure aboard vessels.

Provides training, direction, mentoring and guidance to these individuals.

Ensures supervisory responsibilities are carried out in accordance with federal, state, and departmental policies and applicable laws. Evaluates

staffing needs and organizational effectiveness and planning future agency requirements.

Establishes procedures for vessel operations including procedures for embarking and disembarking vessel passenger and vehicle traffic. Establishes procedures for passenger services operations. Identifies, directs, and maintains improvements in vessel operations, passenger service operations, and customer service. Directs training program with an emphasis on customer service, emergency medical response, and safety related issues.

Ensures vessels are properly manned by overseeing recruitment and dispatch programs for the entire organization

Reviews new construction and refurbishment projects related to vessels.

Takes action and manages responses to high profile vessel incidents and mishaps.

Controls ship movements and assists in authorizing deviations from planned voyages due to community needs, weather events, and mechanical breakdowns.

Monitors and reviews costs of vessel operations and assures that Operations and Ship Services complies with budget. Responsible for reviewing and establishing programs resulting in lower costs.

Seeks out and applies for grants to fund special security and safety projects at terminals. During the absence of the General Manager when directed by the General Manager's Delegation of Authority, shall act as General Manager.

Dealing with emergencies- command vessel Captains. Act as Incident Commander in the Federal Incident Command System that has been adopted by SOA.

Communicate with Federal and State agencies and authorities during mishaps and emergencies.

Resolves difficult and complex problems on an individual basis as assigned by the General Manager

Special projects and other duties as assigned.

### **Marine Engineer Manager**

#### **Duties**

Provides policy direction and administration of the marine engineering design, construction, and maintenance programs for nine Alaska Marine Highway System (AMHS) vessels and 21 shore facilities through 28 ashore staff and 83 licensed vessel operating engineers. Directs new vessel construction, vessel modernization and annual Capital Improvement Project (CIP) maintenance programs.

Using goals and objectives approved by the General Manager, establishes and updates policies, procedures, and standards for the AMHS Marine Engineering Division. Implements those policies through the direct supervision of five senior functional managers (including two Vessel Construction Managers).

Implementation of the DOT&PF's Southeast, Central and Southwest Alaska Transportation Plans including the design and construction of new build vessels.

Marine Engineering conducts long-range planning utilizing DOT&PF State Transportation Improvement Plan (STIP) by which obligation and expenditure of all Federal aid funds including State match funds are planned, programmed, and budgeted.

Administers through supervisory staff a current backlog of vessel design and construction projects, including design/construction of the first Tustumena Replacement Vessel (TRV).

Through subordinate supervisors, directs productive employment of all personnel within the division, exercising substantial responsibility and control over hiring, promoting, transferring, disciplining, and adjudicating grievances of subordinate employees. Delegates authority and assigns responsibility, establishing appropriate review procedures and controls.

Coordinates section activities with other units within the department and region, identifies and implements organization and functional improvements while keeping the General Manager informed of significant division problems and activities.

Drafts nominations and recommendations for national, State, DOT&PF and Southeast performance awards.

Establishes AMHS vessel maintenance and lay-up plans and policies through the assigned Senior Port Engineer.

Assists with drafting and approving final specifications for the annually renewed vessel maintenance contracts which by statute must be awarded to Alaskan shipyards if such yards have adequate capacity and capability.

Formulates requests, justifies, and defends the annual AMHS Capital Improvement Plan (CIP) budget appropriation for AMHS vessel terminal maintenance and overhaul. Then as approved by the General Manager directs the allocation of these funds within AMHS departments and monitors orderly expenditures.

Coordinating with Marine Transportation System/Operations Manager, establishes the number of annual weeks of required vessel maintenance based on crew reported discrepancies, condition surveys, major vessel refurbishment needs, and power and performance issues, as well as Classification Society and U.S. Coast Guard, required annual and five-year equipment and system inspections and dry dockings.

Through the coordinated screening of vessel crew submitted Ship Maintenance Requests (SMR's) by the Senior Port Engineer, prioritizes engine, deck, and passenger service needed annual maintenance ensuring that as much work is accomplished as annual budget constraints will allow.

Monitors daily vessel material conditions through liaison with the Senior Port Engineer and their monitoring of Weekly Chief Engineer's Reports, and various machinery condition analysis program results such as lube oil, vibration, and diesel engine analysis.

Briefs the General Manager and Vessel Operations Manager as required.

Coordinates with the Operations Division to obtain unplanned vessel downtime necessary to make critical vessel voyage repairs to minimize adverse impact on the traveling public.

Working through the port engineering staff, oversees the supervision of the over 80 licensed professional engineers who safely operate and maintain the complex shipboard equipment and systems including propulsion and auxiliary diesel engines, boilers, electrical, refrigeration, and sanitation equipment.

Supervises and coordinates with SE Region Shore Engineering staff, design and major renovation of all AMHS shore facilities, terminals, and piers. Funds the annual condition survey of existing facilities for major refurbishment and new construction. Through a crew of maintenance technicians and their Shore Maintenance Manager supervisor, plans, budgets and coordinates preventative and corrective maintenance annually to assure structurally safe and sound facilities for the traveling public, including uplands, buildings, and loading and unloading bridges and piers.

Through the Senior Vessel Construction Manager, coordinates all activities necessary for the development of the plans, schedules, engineering, specification documentation and the engineer's government estimates to support the competitive procurement of annual vessel modernization using Federal Highway Administration (FHWA) and Federal Transit Authority (FTA) federal aid and State match funds. Projects major modernization and refurbishment of existing vessels and naval architecture. Construction plans are based on stability, propulsion systems, auxiliary systems, vessel layout, and power and performance. Supervises the design specification packages coordination in preparation for the Requests for Proposals (RFP) for Design Study Reports and later preliminary design in preparation of project definitions. Approves the assignment of the contract evaluation committee which reviews the submissions for completeness and appropriateness of proposal. Recommends contract award to Contracting Officer based on evaluation committee findings. As a key member of



each project administration team, stays current on and briefs the General Manager on the status of construction of these projects in shipyards from Portland, OR to Seward AK. Projects are driven by such continually more demanding regulatory requirements as Safety of Life at Sea (SOLAS), and Subchapter "W" of the Code of Federal Regulations. As needed responds to, organizes and directs State defense against construction claims on AMHS procurement contracts. Utilizing knowledge from numerous shipyard visits during design and construction, attempts to resolve all contract administration difficulties as they occur.

Advises the contracting officer and assigned Department of Law and contract legal staff on the technical, construction, and contract administrative aspects of each Request for Equitable Adjustment and claim. Assists with and reviews both the project engineer's input and eventually the Contracting Officer's decision prior to final submission. Makes staff and documentation available to facilitate legal discovery investigations and the drafting of legal briefings and written submissions. Attends and testifies as necessary at Commissioner assigned Hearing Officer deliberations should claims not be settled prior to this point.

Takes action to complete the State's assigned responsibilities as the result of claims settlement decisions.

Directs, coordinates, and monitors progress on all AMHS new vessel procurement programs. Briefs senior management on best procurement strategy and contracting method by which to procure needed new vessels.

Assigns staff, reviews and approves milestones and briefs higher authority on plans and progress to meet demanding implementation milestones of DOT&PF state-wide transportation plans. Through assigned Project Manager and small on-site State project engineering staff, ensures project is planned and executed in accordance with FHWA/ADOT&PF Compliance Acceptance (CA) and sometimes conflicting FTA grant direction.

Coordinates timing and attendance at quarterly on-site construction progress reviews, key training and testing events, dock and sea trials, vessel transit to Alaska from the construction site, operational acceptance inspections, shipyard warranty performance and new vessel fleet introduction and engine department staffing. Is required to earn and maintain designation as a State of Alaska Department of Transportation and Public Facilities Warranted Construction Contracting Officer Level 5. With \$250,000 of delegated contracting authority from the Commissioner through the Southeast Region Director (AMHS's usual Contracting Officer), is final approval authority for vessel construction, modernization, and CIP overhaul change orders up to warranted amount. Is final approval authority for all design and construction contract progress payments for AMHS vessel design, construction, modernization, and shore facility maintenance contracts.

Supervises the vessel condition surveys to review and plan for mandatory regulatory changes and upgrades which allow AMHS to maintain two SOLAS certified vessel and service to foreign port, Prince Rupert, British Columbia Canada. Acts as the General Manager in his absence, as assigned.

### **Business Enterprise & Development Manager.**

#### **Duties**

This position directs the daily administration and financial management of AMHS' Finance, Budgeting, and Accounting Sections, in addition to coordinating the annual audits of all funds, analysis of existing and proposed legislation and representing the division at the Marine Transportation Advisory Board meetings and Legislative hearings. This position also

oversees the daily administration of Terminal and Reservations Center operations as well as Marketing. This position is responsible for compliance with state and federal laws, as well as with professional accounting and financial reporting standards. This position is also responsible for assisting the Division Director and Commissioner's office in developing policy related to operations, internal controls, funding, tariffs, and revenue streams of the Division. This position is ultimately responsible for accurately accounting, controlling, and reporting all of the Division's cash flow, and protecting its assets, which currently amount to over \$150 million/year in cash flow and \$1.3 billion in assets.

Direct the management and administration of the Finance Section's fiscal accountability, reporting and financial operations of assets in excess of \$150 million/year and the \$1.3 billion in assets by performing the following: -

- Responsible for developing and establishing division policies and procedures governing the accounting, auditing, budgeting, and public financial reporting for all funds and ensuring all funds and assets are protected and are correctly administered by the division.
- Ensures that all Finance Section accounting is maintained in accordance with GAAP and GAAS and the requirements of the Alaska Statutes and Administrative code.
- Oversees implementation and adherence to federal law, FASB, GASB, and industry standards.
- Manages the fiscal accountability, reporting, budgeting, all financial operations, cash flows, and revenue streams for AMHS.
- Works directly with the Commissioner to set tariffs and policies throughout the system to maximize revenues. This includes analyzing traffic, supply and demand, and price elasticity of demand.
- Ensures the overall financial, accounting, budgeting, and shore operations of AMHS operate timely, accurately and according to established procedures in compliance with industry standards and state and federal law.
- Coordinates and has responsibility for accounting, budgeting and financial reporting requirements with other State agencies (Treasury, Finance, Administration, OMB, Leg. Audit), outside agents and providers, and record keepers.
- Responsible for the accuracy of and oversees production of annual reports and audited statements for all AMHS funds as well as the AMHS section of the CAFR.
- Develops, implements, and directs accounting policies and procedures to ensure AMHS compliance with generally accepted accounting principles and adherence with accounting and financial reporting requirements of finance related agreements.
- Prepares financial information, including cost/benefit analyses and makes recommendations for labor negotiations based on the results of the analyses.
- Confers with internal and external groups in matters relating to legal and fiscal accountability, and existing and proposed legislation.
- Interpret statutes, regulations, administrative procedures, federal requirements, regulatory and industry pronouncements, and all financial standards and requirements impacting the financial responsibilities of the Division.
- Develops and coordinates responses to requests for information from the Governor's office, legislators, auditors, analysts, other State agencies, and the public.
- Analyze Finance, Accounting, Budgeting, and Operations Section processes and procedures to optimize and streamline as well as ensure proper accounting and operational integrity of accounting, reporting, and process functions.
- Coordinate with division sections and other state agencies on projects and cyclical workload increases.

- Establish, implement, and monitor internal controls to protect AMHS revenues, cash flows, and assets.
- Formulate AMHS policy in conformity with department policy. Make policy recommendations to the Commissioner and Division Director on issues related to the operations and business activities of AMHS. Establish methods and administrative controls, along with policies and procedures to ensure achievement of goals and objectives, including improvements to efficiencies made to the AMHS business model.
- Resolve issues where interpretation of statute, regulation or federal law is not clear.
- Consult with third parties, record keepers and counsel regarding federal issues surrounding the federally funded projects; work with FHWA and FTA to meet prescribed deadlines for funding qualifications and record keeping, and resolve any issues that may arise.
- Work with Commissioner and Division Director to determine the appropriate IT solutions to serve the complex financial responsibilities of the Division.
- Work with Division Director to ensure correct application of all business and USCG rules governing AMHS.
- Leads the agency's finance, accounting, budgeting, terminals, call center, and marketing sections including supervising professional, technical, and support staff, prioritizing and developing work plans, evaluating staff performance, monitoring progress on projects and assignments, interpreting policies and procedures, assisting making hiring and termination decisions, providing oversight and resolving conflicts for staff in these sections, and providing training and development for staff.
- Develops and implements divisional goals and objectives. Oversees vessel scheduling to comply with annual budgets Create and oversee strategies and allocation of all AMHS funds.
- Recommend and implement expenditure controls where necessary. Review fiscal information to determine if AMHS is operating within budget limitations and statewide policies.
- Keep the Commissioner's office and Division Director informed regarding issues as well as recommendations for issue resolution.

Supervises and directs the work of the following: -

- One Marine Traffic Manager who oversees the Marine Shore Operations Section including the Terminals and Reservations Center;
- One Budget Analyst II who oversees the Budget Section.
- One Administrative Officer II who oversees the Accounting/Admin/Finance Section
- One Development Specialist II who oversees the Marketing Section
- One Vessel Schedule Coordinator.

Provides training, direction, mentoring and guidance to these individuals as well as the supervisory authority outlined in Section 5 of this document. Ensures supervisory responsibilities are carried out in accordance with federal, state, and departmental policies and applicable laws. Evaluating staffing needs and organizational effectiveness, and planning future agency requirements.

Assist the Commissioner, Deputy Commissioner, and Division Director to develop and analyze legislation and implement any necessary changes to AMHS. Make recommendations on needed statutory and regulatory changes for all programs and operations of the division. assist in drafting needed statutory changes; prepare fiscal analysis of new legislation; develop costs associated with proposed legislation; prepare fiscal notes and other appropriate documentation; serves as the division's expert in legislative testimony regarding the financial and operational status of AMHS; Represents AMHS at Legislative hearings and provides

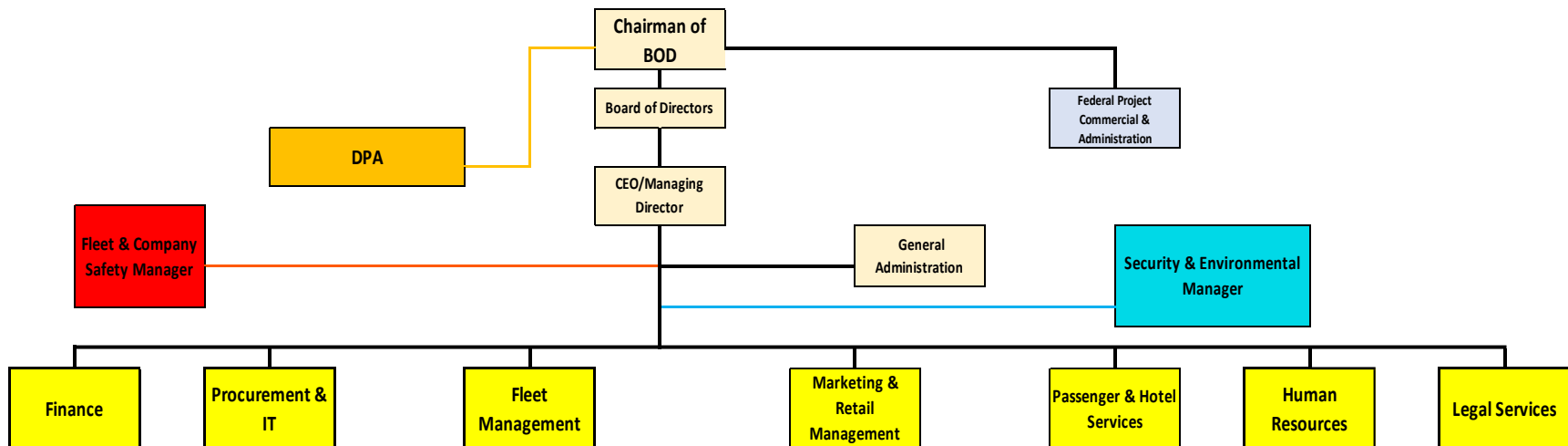
testimony. Analyze and respond to legislation and make recommendations on needed statutory and regulatory changes for programs and operations of the division.

Assist the Division Director, Deputy Commissioner and Commissioner with preparations for Marine Transportation Advisory Board meetings. Serve as the division's representative and present material as needed. Present and explain financial information to the MTAB regarding AMHS at MTAB meetings. Prepares and presents financial information and reviews the accuracy and correct application of projections, scenarios, and analyses requested by the MTAB.

- Conduct special assignments, studies, analyses and other duties, both long-range and ad-hoc, as assigned by the Division, Department management, or Marine Transportation Advisory Board. This may result in oral and/or written testimony on budget, operations, and other financial issues before the legislature, various government or non-government audiences, boards, and committees.
- Develops financial forecasts and models, as necessary, for budgeting, planning, and analysis, or to support legislative, regulatory, or policy changes.
- Respond to legislative, press and public information requests. Plans, develops, and oversees management of operating and capital budgets for AMHS. Oversees AMHS budget and financial work with other state department personnel, such as OMB, Dept. of Revenue, and Dept. of Administration.
- Review state administrative policies and procedures; examine impact on AMHS operations, and recommend changes if necessary.
- Along with the Division Director, oversee the planning, organizing and coordination of the AMHS organizational structure, programs, staff and other resources.
- Assist Deputy Commissioner and Division Director in administration of Division overall operations.
- Control resources, processes, timeframes, and priorities to efficiently and effectively support AMHS operations.

## Appendix C Idealized Fleet Management Organization for Ferry Shipping Company

ORGANOGRAM SHOWING WHERE SENIOR MANAGEMENT FITS WITH OTHER DEPARTMENTS



1. Ideally a Board of Director (BoD) would head up each department.

2. Legal and HR Departments can be farmed out to Private enterprise firms.

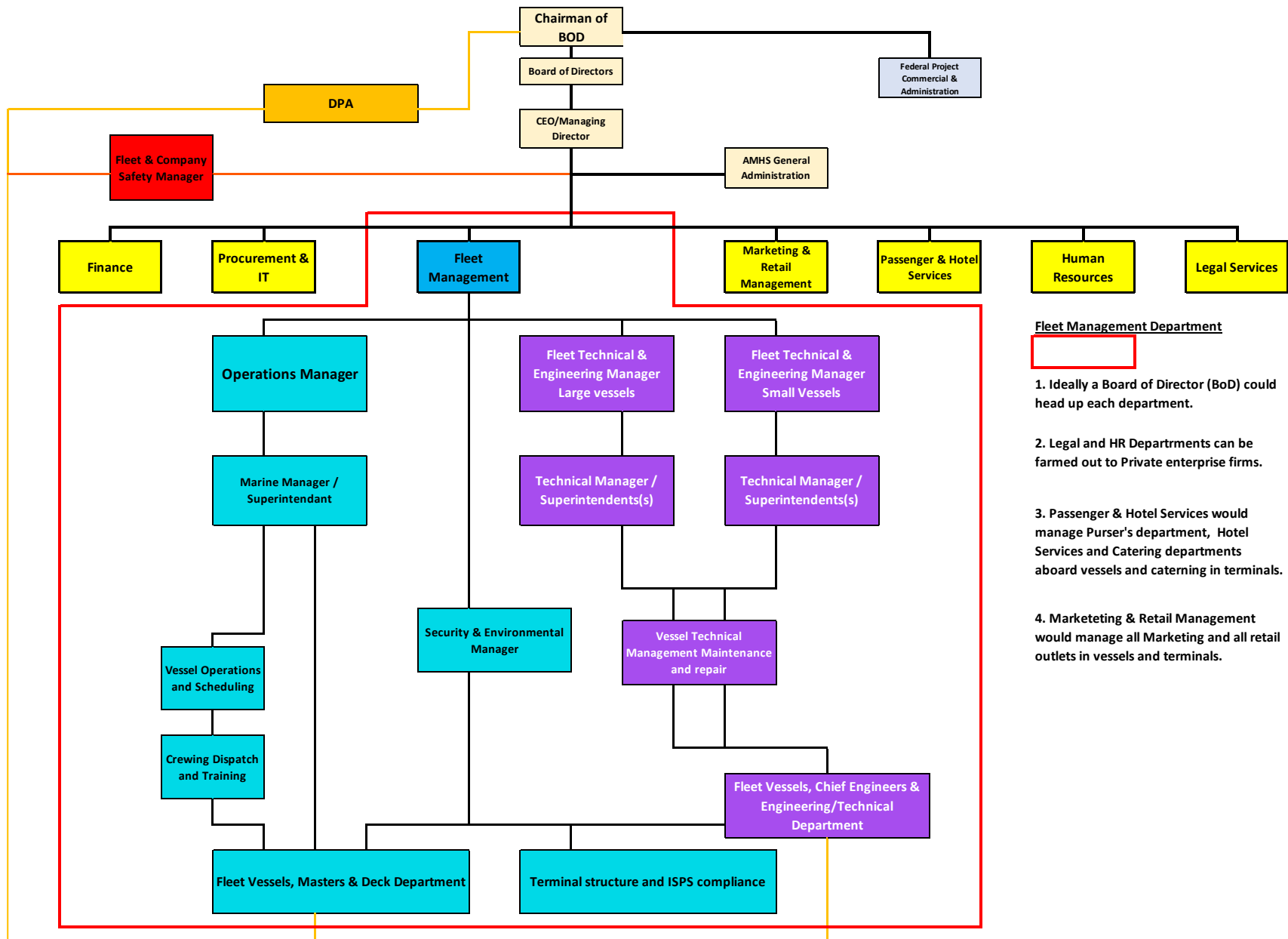
3. Passenger & Hotel Services would manage Purser's department, Hotel Services and Catering departments aboard vessels and catering in terminals.

4. Marketeting & Retail Management would manage all Marketing and all retail outlets in vessels and terminals.

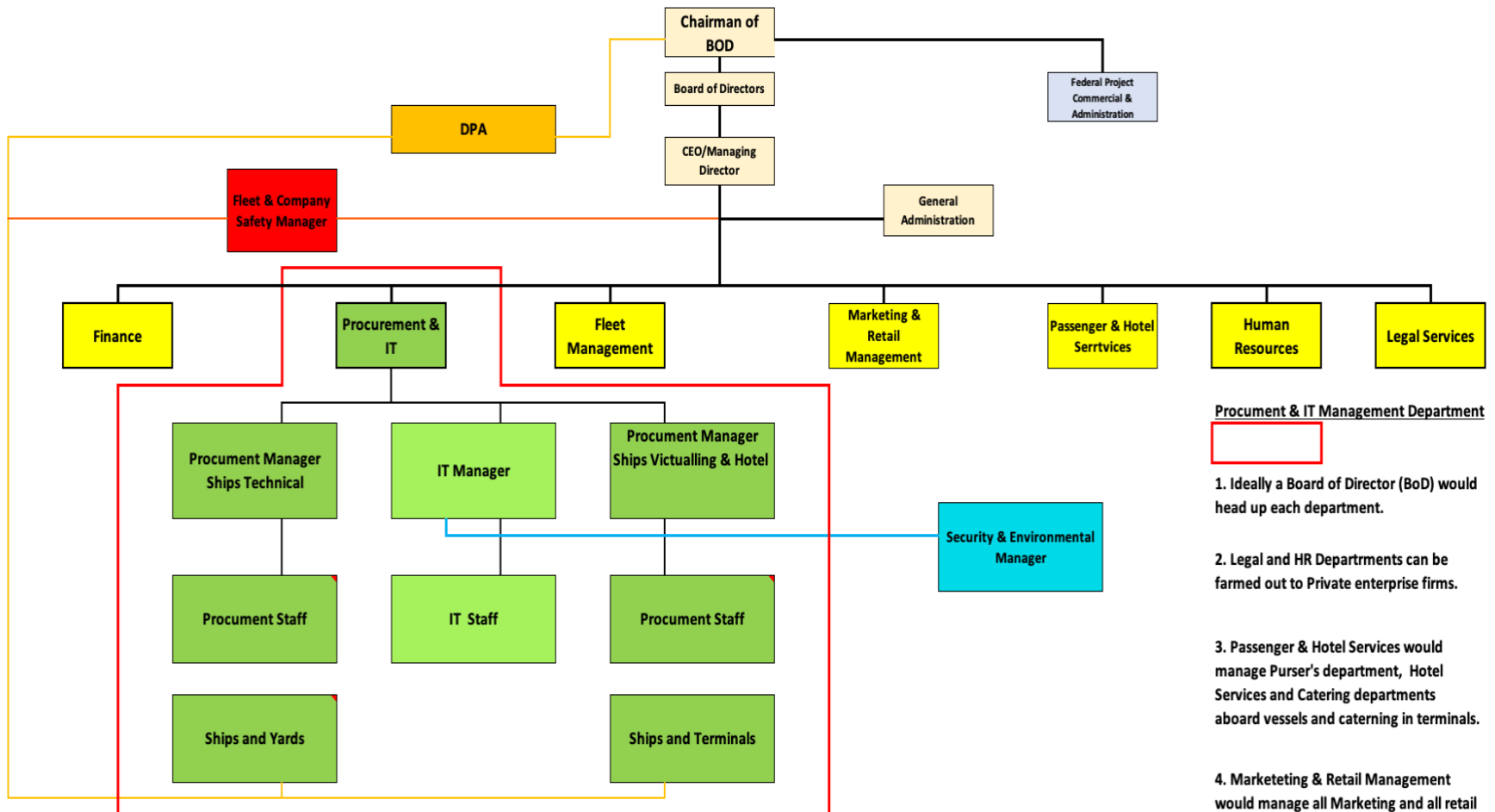
5. General Management would also include Insurance Management

**NOTE: THIS OGANOGRAM IS GENERIC AND REPRESENTS A TYPICAL SHIPPING/FERRY COMPANY MANAGEMENT STTUCTURE. AMHS COULD BE CONSIDERABLY DIFFERENT AND COULD TAKE TIME TO DEVELOP**

# ORGANOGRAM SHOWING WHERE FLEET MANAGEMENT FITS WITH OTHER DEPARTMENTS



# ORGANOGRAM SHOWING WHERE PROCUMENT & IT MANAGEMENT FITS WITH OTHER DEPARTMENTS

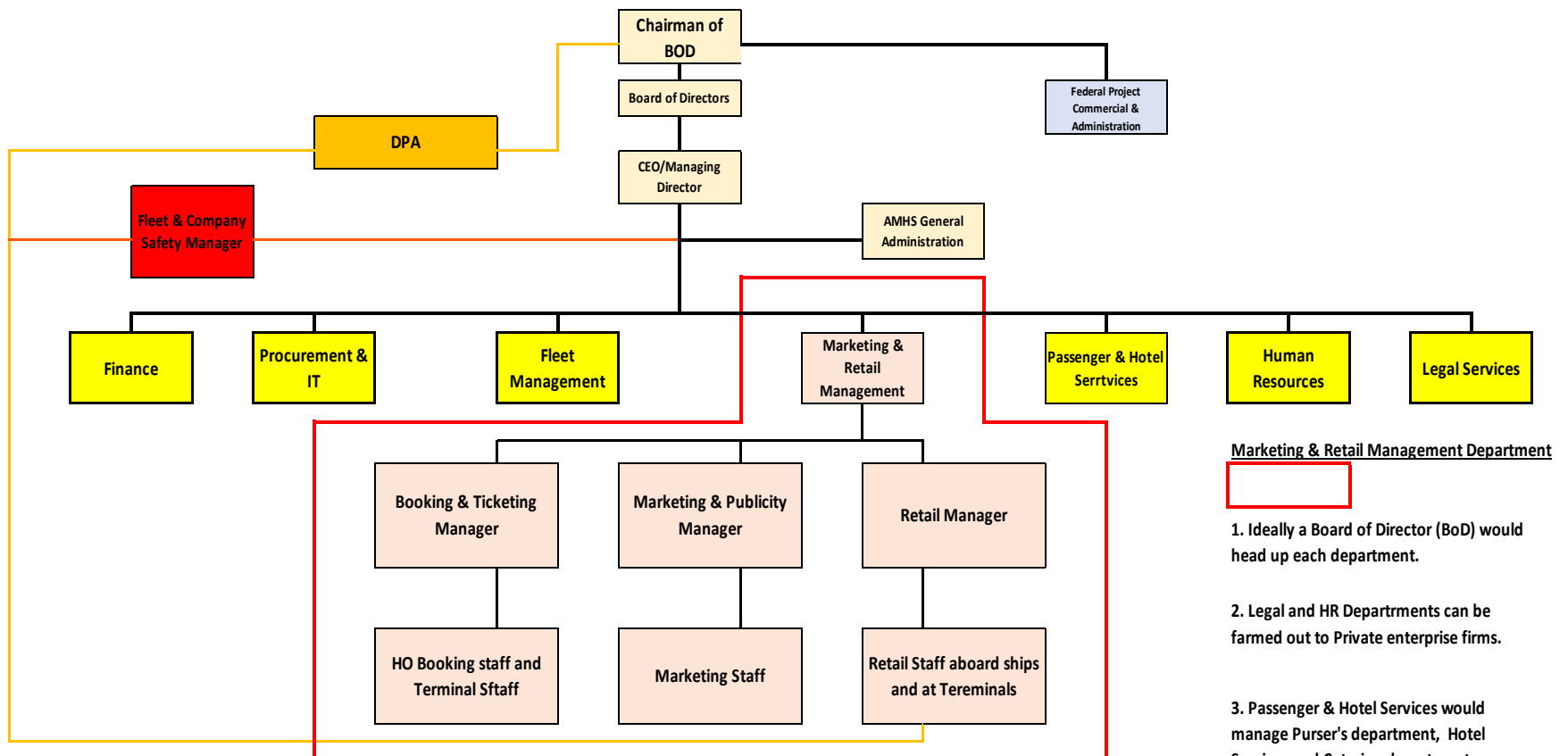


## Procurement & IT Management Department

1. Ideally a Board of Director (BoD) would head up each department.
2. Legal and HR Departments can be farmed out to Private enterprise firms.
3. Passenger & Hotel Services would manage Purser's department, Hotel Services and Catering departments aboard vessels and catering in terminals.
4. Marketeting & Retail Management would manage all Marketing and all retail outlets in vessels and terminals.
5. General Management would also include Insurance Management

NOTE: THIS OGANOGRAM IS GENERIC AND REPRESENTS A TYPICAL SHIPPING/FERRY COMPANY MANAGEMENT STTRUCTURE. AMHS COULD BE CONSIDERABLY DIFFERENT AND COULD TAKE TIME TO DEVELOP

# ORGANOGRAM SHOWING WHERE MARKETING & RETAIL MANAGEMENT FITS WITH OTHER DEPARTMENTS





## Appendix D AMHS Staff Questionnaire carried out by Consultant Team

**Questionnaire – Navigation & Navigation Bridge.** The following responses of interest were received from those on the navigation bridge. Only responses of note and interest have been included. For those on the bridge

- 14% of respondents did not find the Bridge Navigation fit up-to-date
- The majority of ships did not have a modern speed log.
- manual tools such as a sextant/chronometer were unavailable
- No ships were fitted with a vessel stability computer.

**Staff Questionnaire – Deck & Engineer.** Notable responses are shown below.

- 22% of respondents did not feel listened to
- less than half of respondents had operational meetings
- many do not think that the paint on vessels is adequate

DECK and ENGINEER	YES	NO
1. Are you cross trained with other AMHS Ferries. If Yes	91.7%	8.3%
8. i.e. are you able to issue Work Orders / Input of work carried out/completed, including non- planned events/repairs. Update of spares inventory for any spares used.	88.9%	11.1%
9. To address any training deficiencies, is it your belief that classroom training or on board "cross" training would be more appropriate to address your specific training needs?	80.0%	20.0%
23. Is there a Fuel/Bunker Analysis program in place?	22.2%	77.8%
28. Do you feel you appreciated in your working environment and are you listened to, if you have good suggested ideas for improved operational efficiency?	77.8%	22.2%
29. Do you have an onboard "Ship Management Team"? With representatives from all heads of dept. If yes	41.7%	58.3%
30. Are meetings held to discuss current operational and technical issues with a view to address them with close out action dates. And.	41.7%	58.3%
50. Do you feel valued as a member of the Company?	42.9%	57.1%
52. Do you have a voice in terms of future maintenance or drydocking?	60.0%	40.0%
61. Do you have a Safety Tool Box Procedure and do you conduct – Safety – Tool Box Talks	20.0%	80.0%
62. Do you have "Safety Suggestion" cards/post boxes distributed around the ship for crew use, to promote a safety awareness culture?	18.2%	81.8%
63. Deck & Engine consumable store – do you consider these adequate for the day to day running of the vessel?	83.3%	16.7%
67. Given the poor weather experienced by vessels on most routes, do you think maintenance routines could be improved by carrying temporary riding squads?	27.3%	72.7%
68. Do you consider the vessels paint system provided for exposed surfaces adequate considering the harsh weather conditions experienced?	50.0%	50.0%

**Staff Questionnaire – Cargo Spaces.** Notable responses are shown below.

- approximately 40% of respondents said cargo spaces were not adequate
- 60% noted that valves cannot be closed remotely
- 50% thought improvements to cargo spaces could be made

	percent	
CARGO SPACES	YES	NO
1. Do you consider the cargo space aboard your vessel adequate for the service she trades in?	62.5%	37.5%
3. Do you feel that the cargo spaces are adequately vented?	57.1%	42.9%
5. Are vehicles regularly lashed before sailing?	75.0%	25.0%
8. Do you think there is adequate lashings aboard for the service the vessel trades?	87.5%	12.5%
10. Do you think the AMHS roadway links to ramps should be standardized?	85.7%	14.3%
19. Are you aware that the cargo spaces have sea valves?	83.3%	16.7%
21. Are the valves regularly checked?	80.0%	20.0%
22. Can the valves be closed remotely?	40.0%	60.0%
27. Do vehicle deck operations wear PPE, such as high visibility jackets, hard hats and industrial safety footwear?	62.5%	37.5%
28. Do you think improvements could be made with cargo handling?	50.0%	50.0%
30. Do you think there could be safety improvements on the vehicle decks?	57.1%	42.9%
32. Do you consider that preplanning of cargo loadings would help vehicle deck operations?	42.9%	57.1%
34. Is the vessel's stability calculated before leaving port and reported to the Master and relayed to shore management?	83.3%	16.7%

### Staff Questionnaire – Hotel & Passenger Services. Notable responses are shown below.

- 67% of respondents did not think customers were receiving value for money.
- 33% of respondents said that there were not enough toilet facilities and did not think facilities were clean enough.

	percent	
HOTEL AND PASSENGER SERVICES	YES	NO
4. Do you feel you add value or could you do more?	33.3%	66.7%
11. When it comes to passenger services, do you think the customer is getting value for money spent?	33.3%	66.7%
17. Can customers get an alcoholic drink at a bar on your vessel?	50.0%	50.0%
21. Do you consider there are enough passenger toilet facilities aboard your vessel?	66.7%	33.3%
22. Do you consider the toilet facilities are kept clean and hygienic?	66.7%	33.3%
37. Are there any facilities aboard for passengers to make telephone calls or use Wi-Fi facilities connected to the web?	0.0%	100.0%

### Staff Questionnaire – Engineering Offices. Notable responses are shown below.

- 50% of respondents indicated regarded pricing as an AMHS priority for projects
- No respondents said they were involve in work approvals
- 50% said AMHS staff were happy with shipyard performance

- 50% said promotion prospects were good

ENGINEERING OFFICE & SHORE MANGEMENT	percent	
	YES	NO
1. Are you familiar with and have you read the Alaska Construction Manager & Vessel Construction Manager III Manuals and do you perform your duties in accordance with the manual?	50.0%	50.0%
3. Do you conduct regular ship inspection audits and do you have a generic ship inspection document/template for such audits? If yes.	0.0%	100.0%
16. Do AMHS consider competitive pricing of works as a priority? If so, how is this being addressed for in water and out of water works?	50.0%	50.0%
27. Are ship's staff involved in work approvals?	0.0%	100.0%
53. Are AMHS staff and senior management happy with shipyard performance?	50.0%	50.0%
66. Do you consider your promotion prospects are good?	50.0%	50.0%
71. Are you a member of a trade union?	50.0%	50.0%
73. Does the company provide you with training?	0.0%	100.0%
79. Do you carry out a Safety Performance Review?	0.0%	100.0%
82. can you provide a copy of a management review findings/minutes	0.0%	100.0%

**Staff Questionnaire – Ship Repair Yards.** Notable responses are shown below.

- No respondents had external verification for quality, safety, environmental
- No respondents had third party inspectors on site
- No respondents offered discounts for multi ship contracts

Ship Repair Yards	percent	
	YES	NO
3. Do you have a design office?	0.0%	100.0%
13. Do you hold externally verified certification for Quality, Safety, Environmental? If so, who is the accrediting body?	0.0%	100.0%
16. Are Class/USCG and other third parties based upon site?	0.0%	100.0%
18. Do AMHS have priority for wet berth & dry dock space?	50.0%	50.0%
19. Do you offer discounts for multi ship contracts?	0.0%	100.0%
25. Do you produce and work with ITPs (inspection and test plans)?	50.0%	50.0%
30. Are schedules resource, cost loaded?	0.0%	100.0%

Staff Questionnaire – Terminals. Notable responses are shown below.

- terminal employees were not aware of a safety or quality department
- The terminals had no retail outlet or restaurant

Terminals	percent	
	YES	NO
2. Can you provide a Terminal Organization Chart/Organigram?	50.0%	50.0%
7. Do you have a dedicated Safety Department?	50.0%	50.0%
8. Do you have a dedicated Quality Department.?	50.0%	50.0%
12. Do you pass traffic numbers back to a central control?	33.3%	66.7%
13. Do you have a retail outlet?	0.0%	100.0%
14. Do you have a café or restaurant?	0.0%	100.0%
17. Do you have dedicated smoking areas?	75.0%	25.0%